

JANUARY 6, 1934



# Railway Age

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u. 96  
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1850

1860

1870

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1900

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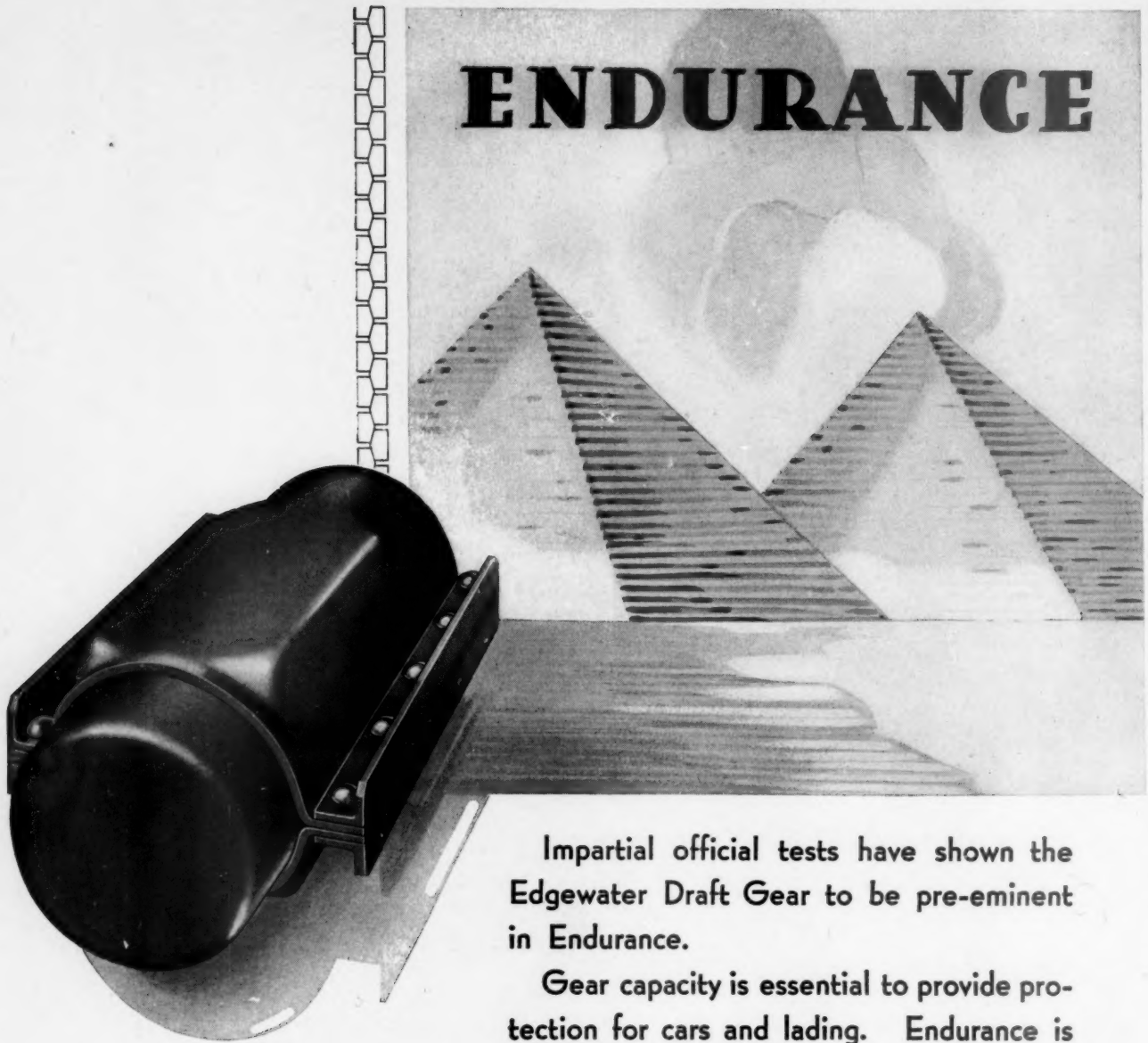
1920

1930

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# Railway Age

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Vol. 96

January 6, 1934

No. 1

## In This Issue

### What Results from High-Speed Freight Service? ..... Page 3

This is Article No. 16 of the Traffic Development Series; it reviews experiences  
 of railways which indicate that fast merchandise trains are decidedly effective  
 in meeting highway competition.

### Busch-Sulzer Develops Locomotive Diesel Engine ..... 5

A description of this eight-cylinder unit which is smallest of a line of two-cycle  
 V-type engines to range from 1,600 hp. to 3,500 hp.

### Railway Purchases Show Gains ..... 18

Presents preliminary 1933 figures which show that expectations were exceeded  
 last year when railways spent approximately \$450,000,000 for fuel and supplies.

## EDITORIALS

NRA Code No Substitute for Regulation.....	1
A New Passenger Terminal Plan.....	2

## GENERAL ARTICLES

What Results from High-Speed Freight Service?.....	3
Busch-Sulzer Develops Locomotive Diesel Engine.....	5
Freight Car Loading.....	8
Interstate Commerce Commission Finds Railway Situation Improving.....	9
Propose New Passenger Terminal for Chicago.....	13
Agreement Reached on \$77,000,000 Loan to P. R. R. ....	15
Railway Purchases Show Gains.....	18

## ODDS AND ENDS ..... 22

## NEWS ..... 23

*The Railway Age is indexed by the Industrial Arts Index and also by the  
 Engineering Index Service*



# 1934

In this, the opening week of the New Year, we extend cordial greetings to our many friends in the Railway World.

We rejoice with them that the improvement already apparent in the railroad situation gives promise of better times to come.

The purchase of wisely chosen new locomotives will contribute greatly to improvement of railroad earning power in 1934.

**THE BALDWIN LOCOMOTIVE WORKS**  
PHILADELPHIA

# NRA Code No Substitute for Regulation

The American Trucking Associations, Inc., which have filed a code for truck transportation under the NRA, in a statement to Co-ordinator Eastman have expressed their opposition to federal regulation of truck transportation until such regulation as may be secured under the code has been given a fair trial. In the same statement this group urges that "railroads not be allowed to quote any rate on short or long notice either for line haul or pickup and delivery service, or both, that is not remunerative, based upon a reasonable cost of the service rendered." In other words, the truck operators propose that they should be allowed to make such rates as they please under NRA authority, they to be the sole judges as to whether such rates are remunerative, but that the railroads should have no such power, and that the authority of the federal government should be exerted to prevent them from making "unremunerative" rates.

### Regulate Rail Rates, Let Truckers Make Their Own

The Co-ordinator is asked to believe that that branch of the transportation industry which has been in operation a century cannot be trusted to know as much about its costs as the federal authorities, whereas, by contrast, novices in the transportation business—and the same individuals who introduced cut-throat competition into it—have now become so scientific and respectable about such matters that they can be trusted to manage their own affairs, thank you, without any scrutiny by the federal regulatory authorities. The truck operators hold, apparently, that railroads and railroad rates should be regulated by federal authorities, who must consider at all times the welfare of the entire public including that of the railroads' competitors, whereas truck operators should be permitted to regulate themselves exclusively in their own interest.

The plain fact is that NRA regulation is no regulation at all when it applies to a part of an industry only. The NRA code for truck transportation may, and probably will, serve to settle many differences which truck operators may have among themselves, but it cannot correlate the truck branch of the transportation industry with the railroad or waterway branches and settle issues which arise between them. The NRA codes applied independently to the various branches of transportation may eliminate ruthless competition between truck opera-

tors or between water lines but they do not and cannot control competition between truck and water transportation on the one hand and the railways on the other.

### One Regulatory Body for All Transport

Perhaps the American Truck Associations may delude themselves and hope to mislead others with their absurd contention that an NRA code should absolve them from the same kind of regulation as that to which the railways are subjected. The record does not show, however, that by such sophistry they have much hope similarly to confuse Co-ordinator Eastman. In his address at the Motor Vehicle Conference of the American Legislators Association at Harrisburg, Pa., on October 20, Mr. Eastman said:

*I entertain little doubt that whatever transportation regulation the federal government undertakes should be administered by a single body and not by several, or at least that any division of responsibility should not follow carrier groups. Otherwise regulatory authority will become the partisan of its own form of transportation, and there will be much less chance of proper co-ordination. (Italics ours)*

Elsewhere in the same address Mr. Eastman said:

For some time the railroads were slow to make rates to meet truck competition, but they are speedily overcoming this initial reluctance, and the motor vehicles and the water lines as well are becoming apprehensive. They have filed and are filing vigorous protests with the Commission against reductions in rates by the railroads, asking that they be suspended for investigation. *It is an anomaly of the situation that the law gives this opportunity to the water lines and motor vehicles, whereas the railroads have no corresponding opportunity to seek public protection against rate reductions on the part of their competitors.*

### Further Delay the Objective

Certainly, in view of these very plain statements on this subject by Co-ordinator Eastman, the truck operators cannot have the naivete to suppose that their plea for NRA regulation for themselves combined with strict federal regulation of the railroads will make much headway with him. Evidently, therefore, their statement was intended primarily for public consumption, in the fond hope that persons having only slight interest in and superficial knowledge of the issues involved might not detect the weakness of their contention; and, as a result, that effective motor transport regulation might once again be postponed, as it has been again and again in the past by reasoning no more sound than that now advanced by the truck operators in their statement to Mr. Eastman.

In spite of the fallacies of the contention, therefore, it will be well not to dismiss it too lightly. Not alone

the truck operators' code organization, but other automotive lobby and propaganda groups are ready to put forth every effort in their power to prevent regulation of motor transport comparable to that to which the railroads are subjected. The National Highway Users Conference has announced its intention to carry on an intensive campaign to prevent commercial motor transport from being subjected to the "straightjacket" of regulation. The National Industrial Traffic League also favors much less strict regulation of motor transport than that now applied to the railroads. The unaccountable association with commercial motor transportation groups of representatives of interests, such as banking and organized agriculture, which actually have little in common with them, gives them an effectiveness in disseminating propaganda and impressing legislators out of all proportion to their importance as an industry and their true representation of public opinion. They have succeeded before in defeating or postponing legislation, in spite of public interest and public demand, by an artificial showing of numerical strength, and there is every indication of their intention again to use the same strategy.

It is no crime in this country to disagree with the policies advocated by the President of the United States. At the same time, it might be well for a group which proposes to do what it can to wreck those policies at least to come out frankly into the open and admit its purpose. The truck interests' opposition to regulation of commercial motor transport by the same federal authority which regulates the railroads goes directly counter to a major declaration of policy by President Roosevelt in the 1932 campaign. He said, in his Salt Lake City speech:

We must not give them (commercial motor vehicles) any unfair competitive advantages over the rails. We do not desire to put motor vehicle transportation out of its legitimate field of business, for it is a necessary and important part of our transportation systems; but motor transportation should be placed under the same federal supervision as railroad transportation. . . . I advocate the regulation by the Interstate Commerce Commission of competing motor carriers.

The contention that truck transportation should be left to its own devices under an NRA code, it is evident, is completely out of harmony with views expressed by the President, even as it is with those of Co-ordinator Eastman. It will be well if the public is made fully aware of this fact.

## A New Passenger Terminal Plan

An article on another page comprises a brief digest of a report prepared under the auspices of the Railway Terminal committee of the city of Chicago for a consolidated or union station designed to provide passenger terminal facilities for all of the railways that are now accommodated in four existing terminals in that city. To any one who is conversant with the many passenger terminal studies that have been made at Chicago during the last two decades, the proposal embodied in this report may be deemed as "just another plan," but compared with some of the earlier plans, the terminal committee's plan has much to commend it.

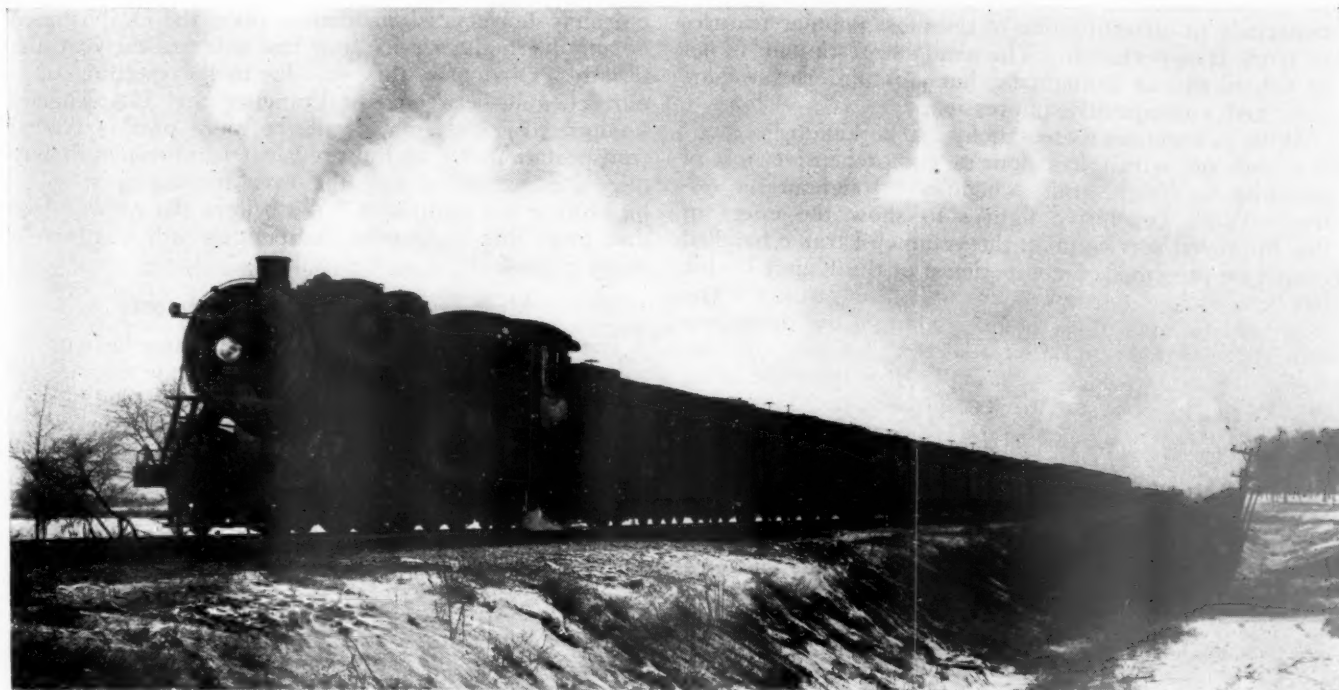
The sponsors of the report contend that the site suggested can be cleared at a minimum expense; that it is readily accessible to all the railways over rail routes already in existence, construction in this connection involving little more than the development of certain wye connections; that the estimated cost, \$19,000,000, is low compared with the cost of improvements of a like character and magnitude built in recent years; and that the use of the proposed terminal in place of the stations it is designed to replace will result in an annual saving of about \$3,000,000.

While there have been no public statements of the attitude of the various railways affected with respect to the plan, it is doubtful if many of them will voice opinions as sanguine as those embodied in the report. The estimated saving in operating expenses has not been borne out by the experience of railways that have abandoned old stations for new ones. Furthermore, a

large part of the saving in this case is contingent upon the profitable disposal of the large terminal areas now in use, a condition that can hardly be fulfilled for some years to come.

But even if these points were waived, it is necessary to consider the plan in the light of the effect of such a drastic recasting of terminal facilities on the many individual interests involved, since it will require certain railways to abandon stations occupying strategic locations, which they now reach over their own rails or over terminal lines in which they have proprietary interests, for another station to which they can have access only by moving their trains for considerable distances over the tracks of other railways.

The occasion for the presentation of a new plan at this time is to focus attention on a local situation in connection with the terminal studies now being made under the auspices of the federal co-ordinator of transportation. However, the co-ordinator is now engaged also in another important study, namely, to determine the reasons for the marked decline in railway passenger travel. In other words, one justification for the construction of new terminals, lack of adequate capacity, is now rarely encountered. If then, new terminals are to be built because those now in use are inefficient or unsuited to present requirements, it would seem that any studies for passenger terminals made at this time must take into account possible changes in the nature of passenger transportation in the future, especially in the light of the current developments that are now appearing in so many quarters.



High-Speed Freight Trains Are a Necessary Part of Any Program of Traffic Development

## What Results from High-Speed Freight Service?

Experience indicates that fast merchandise trains are decidedly effective in meeting highway competition

If speed is what shippers want, and there is ample evidence that this is the case, how have they responded to the efforts which the railways have made to render the kind of freight service desired? Has the speeding up of merchandise freight trains, to the point where they can effect first-morning deliveries between points 200, 300 or even more miles apart, won the approval of shippers in the only form which really counts, which is the regular shipment of freight on such trains? Has competition been overcome and freight traffic attracted on a substantial scale by such outstanding examples of high-speed freight trains, markedly resembling passenger trains in their fast schedules and freedom from time-consuming intermediate terminal delays, as the "Maine Bullet" of the Boston & Maine and the New York, New Haven & Hartford; the "Speed Witch" of the New Haven and the Pennsylvania; the "Blue Streak" of the St. Louis Southwestern; and the "Katy Komet" of the Missouri-Kansas-Texas?

### Conditions Unfavorable for Conclusive Test

Unfortunately, it would be difficult to conceive of conditions less suitable for a fair appraisal of the traffic-producing qualities of high-speed freight trains than

those which have prevailed over the interval during which the railways' principal high-speed freight trains have been operated. Few of the trains of this sort now operated by the railways have been able to make a bid for traffic in anything like normal conditions. Most of them were inaugurated in the depths of the general business depression and some of them have come into being under the somewhat more favorable but still subnormal conditions prevailing in the latter stages of the depression. The traffic handled by these trains has been affected sharply by the abnormal fluctuations in general business conditions, fluctuations which first increase abnormally the business handled by the trains and then subject it to similarly abnormal recessions. A true picture of how much traffic the railways' fast merchandise freight trains have attracted and can be expected to attract by reason of their speed, therefore, is difficult, if not impossible, to draw. What traffic railways operating high-speed merchandise freight trains have enjoyed because of such trains, and what traffic they would still have had without them, have had to be matters for conjecture during the years in which such trains have been operated.

Nevertheless, in the absence of contrary evidence, there is sufficient evidence of certain kinds bearing upon the

traffic-producing qualities of fast freight trains to prove the point, which is that fast merchandise freight service is an essential part of any railway's program for traffic development, and is certain, if given a fair chance, to aid materially in offsetting one of the most popular features of truck transportation. The available testimony is not as voluminous as it might be, but it is uniform in character and, consequently, impressive.

What is some of this testimony? The Union Pacific is one railroad which has done a comprehensive job of speeding up freight train schedules throughout its system. While conclusive figures to show the effect of this improved service upon the volume of traffic handled cannot be presented, the experience of the Union Pacific has been such as to cause one of its officers to say, "The expedited freight train schedule is one of the three outstanding essentials of railroad service designed to meet highway motor truck competition." Describing the effect of one step in the system-wide process of accelerating trains to meet truck competition—in this case the arrangement of a freight train schedule whereby merchandise freight received in Omaha, Neb., as late as 5 p.m. is delivered at North Platte, 281 miles west, by 8 a.m. the next morning—this officer says, "This service, supplementing the lower rates that we published, enabled us to hold a very considerable volume of tonnage that was rapidly being diverted to the trucks. We know this because, while our l.c.l. merchandise tonnage decreased during the first 12 months after we inaugurated this service, our decrease was only about 25 per cent of that of the other railroads in this immediate territory."

#### Innumerable Examples of New Business

The St. Louis Southwestern, scene of the operations of the "Blue Streak," has had a similar experience. An officer of this railway says, "Improved service, notably the 'Blue Streak' inauguration, gave us a marked increase in traffic. Considering our rate disabilities and considering the generally declining volume of tonnage, we have more than held our initial gains. For instance, our 'Blue Streak' tonnage figures show an increase during the June-September business revival larger than other increases noted. We have innumerable specific examples of business secured on account of our operation of the 'Blue Streak,' as well as on account of improved service to and from Memphis, Tenn., and Dallas, Tex."

The "Katy Komet," another fast freight train, put the Missouri-Kansas-Texas definitely in the list of railways which are using fast merchandise trains as a weapon against truck competition. An officer of this road reports, "The effect on our merchandise traffic of the operation of this service has been most gratifying, and we have every reason to believe that continued increases can be expected. Comparisons of our merchandise freight revenue, on both forwarded and received business between certain important points, were shown by months for the first five months of the operation of the improved service, and the fifth month shows an increase in revenue nearly three times as great as the increase for the first month."

#### Fast Service Turned the Tide

On the Southern Pacific, where mixed trains have been employed as a means of speeding up freight service, encouraging results have been secured. "We have noted a very marked improvement (in our traffic) as our schedules and rates are comparable with those of the fast franchise truck lines," says an officer of the Southern Pacific. "Consequently, we are again enjoying a good share of this highly competitive traffic. Before we

established the mixed train between San Francisco, Cal., and Los Angeles, our freight rates were on an equality with those of the franchise truck lines, but the latter made overnight deliveries as compared to our second-morning delivery. Immediately upon the establishment of our overnight service, our traffic increased very materially. Obviously, this was due to the speeding up of our schedule between San Francisco and Los Angeles. Undoubtedly, the future will see more of this type of transportation due to the prevalent hand-to-mouth buying of commodities and the ever increasing speed of highway truck equipment. We believe the railway lines that meet this high-speed competition will continue to enjoy a good share of the traffic."

#### Most Severe Competition Overcome

The New Haven, with its "Accept Today—Deliver Tomorrow" merchandise traffic slogan, and the "Maine Bullet" and the "Speed Witch", its outstanding fast freight trains, has been a pioneer in the use of expedited freight service to hold and recover freight traffic in the face of highway and water competition. The New Haven is probably subject to more competition from a variety of other transportation agencies than any other

#### In the Issue of January 20

Is it hard for shippers to use railway service? Are the rules and regulations applying to the movement of freight by rail so burdensome as to make the simpler truck transportation comparatively more attractive to shippers? Should the railway regulations be relaxed? Are less complicated kinds of rates, such as any-commodity and mileage rates, effective in helping to meet truck competition? These and related questions will be discussed in the next article of the Traffic Development Series, which will appear in the *Railway Age* of January 20.

railroad in the country. It has very active water competition at the various southern New England ports, and the most serious motor truck competition everywhere in its territory. To meet this competition, the New Haven, in conjunction with connecting lines, operates the "Maine Bullet" to provide overnight service between Portland, Me., and New York; the "Speed Witch" to provide overnight service between Boston, Mass., and Baltimore, Md.; and a co-ordinated rail and truck service to provide overnight deliveries between nearly all local points on its lines. Has the New Haven benefited from its enterprise?

The answer is given in the affirmative by an officer of the New Haven who says, "Trains which have been speeded up have had the effect of holding to the railway traffic highly competitive with motor truck transportation. While the traffic increases are not marked, it is felt that we have been able to retain traffic which, with a less refined service, would have gone to competing agencies. The effect of the faster service is marked. Where we are holding our own or increasing slightly the tonnage in merchandise cars on fast trains, business has shown a decline generally, which leads us to believe that the freight is protected in behalf of the railway by the fast movement. Furthermore, this high-speed service has brought into being accounts which have not been

(Continued on page 7)

# Busch-Sulzer Develops Locomotive Diesel Engine

Eight-cylinder unit is smallest of a line of two-cycle V-type engines to range from 1,600 hp. to 3,500 hp.

**T**HE Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo., has recently completed block tests on a two-cycle, single-acting V-type Diesel engine for locomotive service. The engine tested has four pairs of V-cylinders and develops 1,600 hp. at 550 r.p.m. and weighs less than 25 lb. per hp. The designs contemplate units ranging by pairs from 8 to 16 cylinders, the latter to develop 3,500 hp. at 600 r.p.m., and are to serve for main-line passenger and freight locomotives as well as for heavy switching and transfer service.

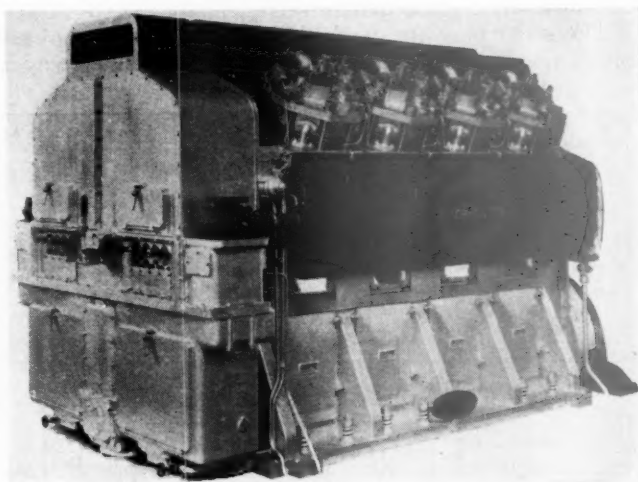
The engine has a cylinder bore of  $13\frac{1}{2}$  in., a piston stroke of 16 in., and is of the trunk-piston type with mechanical fuel injection and integral scavenging blower. In addition to the scavenging blower, the cooling-water pumps and lubricating oil pumps are attached to and directly driven by the engine. The engine shaft is fitted with a flexible coupling for connection to the generator.

The engine main frame and cylinder bloc are combined. They are iron or aluminum alloy castings, depending upon the weight limitations. The frame has a liberal opening on each side for each cylinder, which openings have light oil-tight doors or covers. An oil trough is attached to and below the frame. The working parts are, therefore, fully enclosed in an oil- and vapor-tight structure.

The main bearings for the crankshaft consist of upper babbitt-lined half shells in seats formed in the frame, and lower similar half shells carried in substantial forged inverted caps which are fitted into the frame and supported by heavy bolts of alloy steel.

The cylinder liners or working barrels are of special heat- and wear-resisting alloyed cast iron, heat treated to remove all strains. They are removably fitted into the cylinder bloc. The space between the liners and the walls of the bloc forms the cooling-water jacket for the liners.

Each individual cylinder is provided with a water-cooled cylinder head attached to the bloc by alloy-steel studs and clamping the liner in place. Each cylinder



The Auxiliary End of the Busch-Sulzer Locomotive Diesel

head carries a fuel-injection valve and a compression-relief valve, but no mechanically operated timed valves.

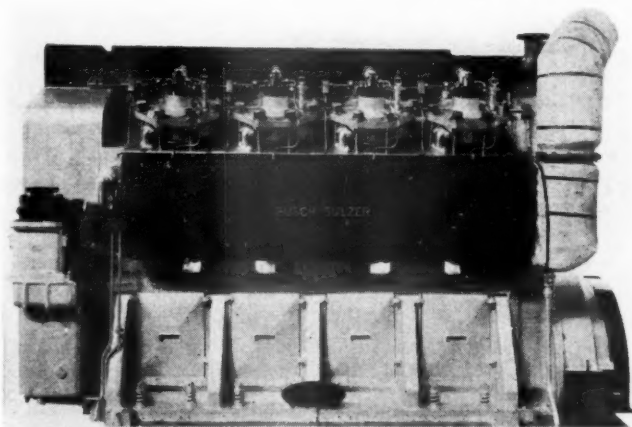
The bloc and liners are so arranged that each cylinder has a "sludge chamber" near its lower end. This chamber is fitted with oil wiper rings, above and below, through which the piston works and which prevent dirty oil, sludge and sparks from the combustion end of the cylinder from passing into the interior of the engine frame or crankcase, and oil from the crankcase from being carried into the upper part of the cylinder and consumed. On the outer sides of the engine each sludge chamber has an opening protected by a glass cover, through which the piston may be observed while the engine is running and its proper lubrication thus assured, avoiding excessive as well as insufficient lubrication. The sludge chambers are electrically lighted. This is a substantial aid to the safe and economical operation of the engine.

The crotch of the frame—the portion of the bloc between the two rows of cylinders—serves as a distributing receiver for the scavenging air and in it are located the automatic scavenging valves attached to the faces of the bloc. The top of the crotch is closed in by the housing of the scavenging blower which extends substantially the full length of the engine. The air-inlet duct to the blower runs along the top of the housing.

In a chamber at the end of the frame farthest from the generator are contained the fuel-injection pumps, the governor and its mechanism, and the cylinder-lubricating pumps. This chamber is closed by light hinged doors. Adjacent to the chamber are located the cooling-water circulating pumps and below it the lubricating oil pumps and the fuel-transfer pump.

## The Piston and Connecting-Rod Assembly

The crankshaft is a single steel forging of heat-treated open-hearth steel. It is proportioned to be of ample



Busch-Sulzer 1,600-Hp. V-8 Locomotive Diesel Engine

strength and to avoid injurious torsional critical vibrations. Each crank pin serves for two opposite cylinders, so that the number of cranks is half that of cylinders.

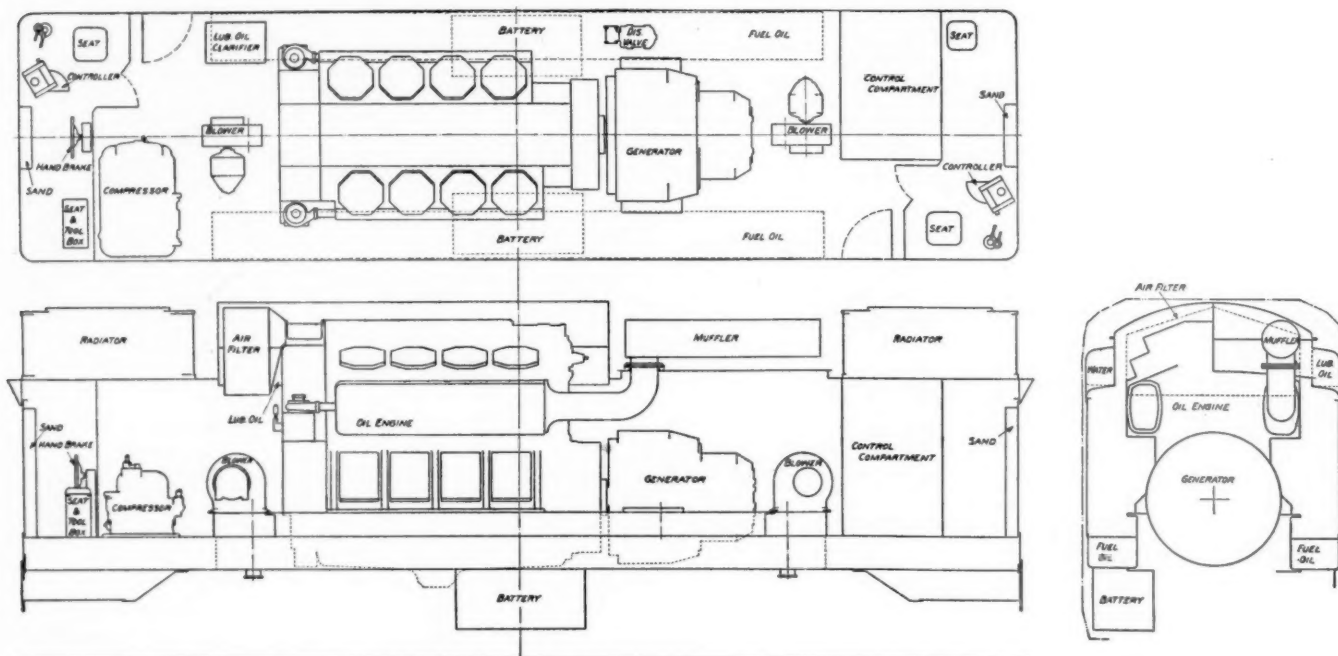
The crank-pin bearings, or boxes, are aluminum alloy forgings, heat-treated and babbitt lined. Alloy steel bolts are used for these bearings.

The connecting rods are heat-treated open-hearth steel forgings and are bored throughout their length for the passage of lubricating oil to the wrist pins. The lower end of the rod is developed as a foot for the attachment of the crank-pin bearings; the upper end as a flange for the attachment of the wrist pin, instead of the conventional arrangement in which the top of the rod carries a wrist-pin bearing.

The wrist pins are of hardened steel, ground and polished on their working surfaces. Each pin is rigidly

indenter wall. The exhaust ports are controlled by the pistons and are located around one half of the circumference of the cylinder and communicate directly from the interior of the cylinder into the exhaust header.

The scavenging and charging are according to the Sulzer system, with two tiers of ports around one half of the cylinder circumference, opposite the exhaust ports. The upper tier, which is uncovered by the piston before the exhaust ports are uncovered, is controlled by automatic valves, opening toward the interior of the cylinder. These valves are located in the crotch receiver, as previously described, and prevent a "blow-back" of exhaust gases into the receiver, as they remain closed until the pressure in the cylinder has fallen below that of the air in the receiver. The scavenging ports in the lower tier form a direct communication



Cab Arrangement of a 1,600-Hp. Diesel-Electric Switching and Transfer Locomotive Using the Busch-Sulzer Engine Unit

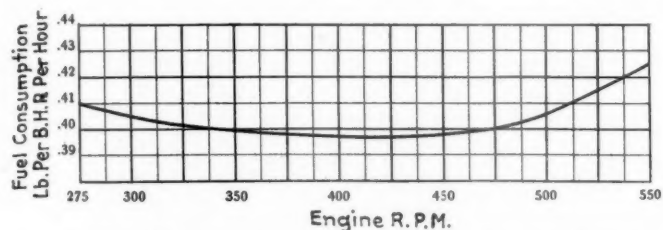
bolted to the flange at the top end of its connecting rod, the flange resting against a flat surface milled into the lower side of the pin. The wrist pin takes its bearings in a housing, the construction being such that the pin has a full-length bearing on its top which carries the piston pressures, the piston pressure on this bearing being thus about one half of what it would be with the conventional construction.

The assembled wrist-pin housing and piston form a single structure. Both are of aluminum alloy. The housing is attached to the inside of the piston, near the top, and incorporates the wrist-pin bearings so that the piston itself is free from heavy bosses, usually required for the attachment of the pins and the walls of the piston skirt are not pierced by any holes. Thus, all transverse sections of the piston proper are concentric symmetrically closed circles, avoiding distortion and leakage of lubricating oil to the cylinder.

Along the front of each line of cylinders extends a water-jacketed exhaust header, into which the cylinders on that side exhaust. Each header will exhaust into a muffler on the roof of the locomotive. Oil-catching and spark-arresting provisions are connected to each header and are arranged to drain to the roadbed.

The exhausting, scavenging and fresh-air charging of the cylinders are performed through ports in the cyl-

inder wall. The exhaust ports are controlled by the pistons and are located around one half of the circumference of the cylinder and communicate directly from the interior of the cylinder into the exhaust header. The scavenging and charging are according to the Sulzer system, with two tiers of ports around one half of the cylinder circumference, opposite the exhaust ports. The upper tier, which is uncovered by the piston before the exhaust ports are uncovered, is controlled by automatic valves, opening toward the interior of the cylinder. These valves are located in the crotch receiver, as previously described, and prevent a "blow-back" of exhaust gases into the receiver, as they remain closed until the pressure in the cylinder has fallen below that of the air in the receiver. The scavenging ports in the lower tier form a direct communication



Test Records of Fuel Consumption of the Busch-Sulzer 1,600-Hp. Engine from Three-Quarters Load at Half Speed to Full Load at Full Speed

air at a pressure above that of the back pressure of the exhaust. This effects a moderate degree of supercharging without separate machinery for this purpose.

The scavenging air is furnished by a blower of the

rotary positive-displacement type, with top suction and bottom discharge. It is driven through gears and a flexible coupling from the crankshaft. The air passes through filters and a muffler in its passage to the blower and is discharged directly into the crotch receiver.

### Fuel Injection

The fuel injection system comprises a fuel booster pump, a fuel injection pump, fuel filters, and fuel valves. The system is the AEG-Hesselman direct injection system, in which the fuel-injection pump has a separate plunger and barrel for each working cylinder. The quantity of fuel delivered to the cylinder at each delivery stroke of the pump for each power stroke of the working piston is regulated by the point of opening of a spill valve on the pump, during the delivery stroke of the pump plunger. This point is varied by the engine governor, being earlier when the load is light and little fuel is needed, and later when the load is heavier and more fuel is needed. The delivery pressure of the fuel-injection pump is around 4,500 lb.

The fuel is delivered by each plunger of the fuel-injection pump to its individual fuel valve, on its way passing through a fine filter. The fuel valves are of the AEG-Hesselman membrane spring type and communicate with the spray nozzles in the cylinders. The valves are opened by the pressure of the fuel oil as soon as the respective pump plunger begins to deliver fuel, and are closed by the membrane springs as soon as the oil pressure is relieved by the opening of the spill valve.

In ordinary engines operating at constant speed the fuel "lead"—i.e., the point ahead of top dead center of the working piston at which the injection of fuel begins—is constant, but this engine intended to operate at any speed between half and full is provided with an automatic device for varying the fuel lead to suit the engine speed. This makes it possible to maintain substantially constant full torque at all engine speeds.

### Control and Lubrication

The speed of the engine is under control of a fly-ball governor which maintains the speed at that for which the governor is at the time adjusted—anywhere between half and full speed. The adjusting of the governor is accomplished by a hand-operated device, that enables the variation of the operative speed of the governor from a remote point. Thus the engine may be run at the speed that is most advantageous for the existing locomotive speed and load, and the track conditions. The engineer's control of the engine speed is incorporated with the control of the traction motors.

The general lubrication of moving parts of the engine is on the pressure system. Separate mechanical lubricators are provided for the lubrication of the cylinders, these automatically being kept filled with clean oil.

The cooling of the engine is effected by water circulated through the respective jackets, cylinder heads and fuel valves by attached pumps. The water passes upward through the parts to be cooled, to the radiators on the top of the locomotive, whence it flows back to the pumps for recirculation.

The engine is started by operating the generator as a motor, current being furnished by storage batteries for this purpose. As this current is being switched onto the motor the compression is relieved in all cylinders to reduce the power required to be developed by the motor. After the crankshaft has been turned over a few times by the motor, the fuel delivery to the cylinders is started, which action also cuts out the compression reliefs so that compressions and fuel ignitions immediately commence

and power is developed by the engine. The engine is shut down by merely cutting out the delivery of fuel to the fuel valves. This can be done from the engineman's cab.

As the speed of the engine is reduced when the load is low, the engine will ordinarily operate at loads not under two thirds of that corresponding to full load at the respective running speed—i.e., at full speed, two thirds of full rated load; at half speed, one third of full rated load. Therefore, its fuel consumption will be consistently near its best and may be figured safely at .42 lb. per engine b.hp. per hr., or, say, the engine will deliver about 18 b.hp.-hrs. per gallon of fuel.

The eight-cylinder engine has been operated over 500 hours on the test bed, including a 48-hour continuous run at varying loads and speeds with one period of 4 hours continuous full-load operation. The fuel consumption records of these tests are shown in one of the illustrations. Examinations following the test showed the engine to be in excellent condition.

## What Results from High-Speed Freight Service?

(Continued from page 4)

seen by railway carriers for a number of years past. Future prospects in this direction are favorable to the retention of traffic and to an increase in the volume handled. We are quite strong in our belief that the acceleration of these schedules is a step in the right direction.

### Traffic Recovered by the "Maine Bullet" and the "Speed Witch"

"The most outstanding specific example of traffic developed by high-speed service is that created by the "Speed Witch" and the "Maine Bullet". These trains provide an overnight service between their respective terminals, as well as between important intermediate industrial centers. While some of the traffic now being handled on an overnight basis was enjoyed by the railway prior to the inauguration of these high-speed schedules, it was rapidly slipping away to highway movement. Not only have the high-speed schedules forestalled this loss, but they have also attracted to railway movement a very substantial tonnage which, in some instances, was moving by truck on account of flexibility in service and, in other cases, by water lines on account of differential rates.

"From the standpoint of carload traffic, the outstanding example of high-speed service is the 'fleet' movement of citrus fruits between coastwise steamers at New York for various New England destinations, these cargo lots being of sufficient volume to justify a highly specialized service. The response with which it has met in the matter of increased tonnage testifies as to the satisfaction of the trade."

### Perishable Traffic Recovered

Truck competition for such perishable commodities as citrus fruits and vegetables which move to markets hundreds of miles distant from the growing areas has put a substantial drain upon the freight revenues of many railways. Can speed of railroad freight service win back this lost traffic?

Three years ago, the Atlantic Coast Line and other roads serving Florida accelerated their perishable freight trains from points within the state so as to reduce by 24

hours the time in transit involved in completing deliveries to the principal eastern and western markets. Impressive road speeds, made possible by expenditures for modern equipment and other improved facilities, were necessary to bring about this shortened delivery time, but these were secured without difficulty. The success of the accelerated service was immediately apparent, and during the 1930-31 season the Atlantic Coast Line alone transported 100,878 cars of fresh fruits and vegetables, the heaviest movement of such traffic which it had ever enjoyed.

### High-Speed Service Not All That's Needed

From this testimony, the conclusion can fairly be drawn that high-speed freight service, easily possible for modern railway equipment and methods, is a powerful weapon against truck competition. Where it has been tried, it has turned the tide, stopping the flow of traffic away from railways to trucks and steadily turning it back once more to the rails. High-speed freight service does this because speed is one thing that shippers want and must have.

But speed alone is not enough. As pointed out by the officer of the Union Pacific, quoted in this article, it is one of the three essentials of railroad service designed to meet highway competition. The other two are comparable rates and pick-up and delivery service. Just as speed alone is not enough, so are pick-up and delivery service and low rates inadequate without speed.

High-speed merchandise freight trains are a necessary part of any railroad's program of freight traffic development. They meet a modern need in freight transportation, and they have aided and will continue to aid in the replacement upon the rails of much traffic which has been won away by trucks.

## Freight Car Loading

WASHINGTON, D. C.

**R**EVENUE freight car loading in the week ended December 23 totaled 527,067 cars, a decrease of 27,765 cars as compared with the preceding week but an increase of 32,557 cars as compared with the corresponding week of last year. All commodity classifica-

tions showed reductions as compared with the week before except ore, which showed an increase of 367 cars, and all except grain and grain products, and coal showed increases as compared with last year. Miscellaneous loading was 43,997 cars above that for the corresponding week of last year. The summary, as compiled by the Car Service Division of the American Railway Association, follows:

### Revenue Freight Car Loading

Week Ended Saturday, December 23, 1933

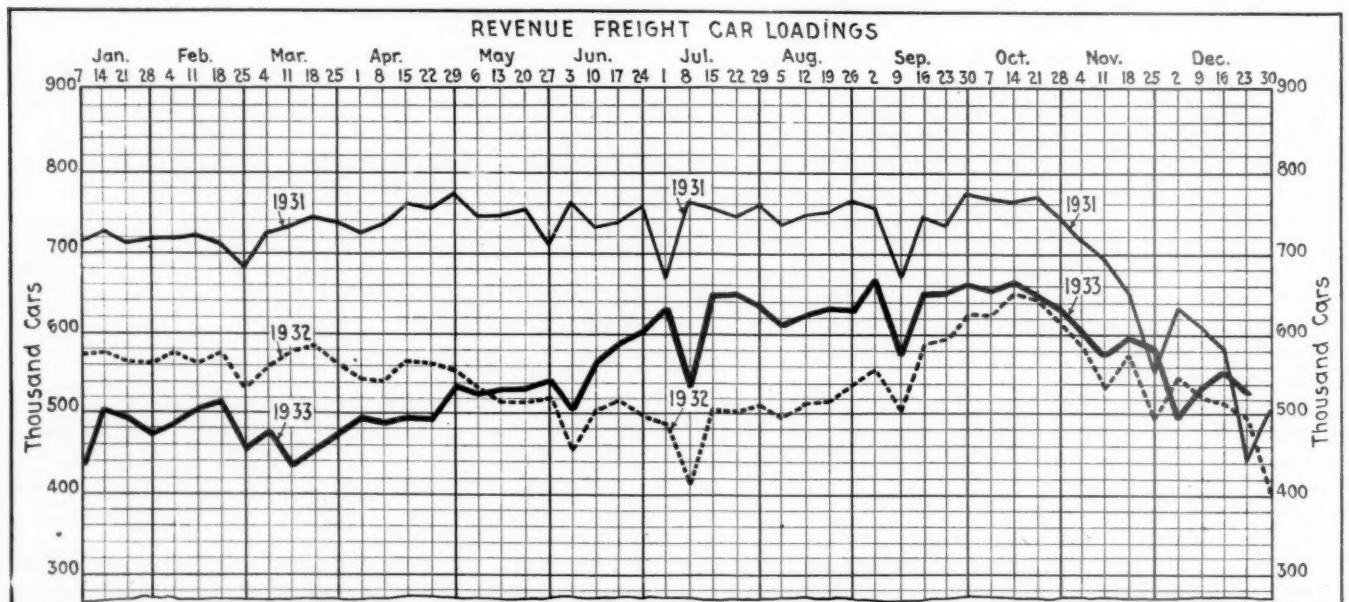
Districts	1933	1932	1931
Eastern .....	125,309	118,348	99,590
Allegheny .....	105,715	96,886	91,223
Pocahontas .....	36,982	38,433	26,642
Southern .....	76,500	75,065	64,673
Northwestern .....	59,191	55,462	49,088
Central Western .....	79,590	70,011	69,208
Southwestern .....	43,780	40,305	40,475
Total Western Districts.....	182,561	165,778	158,771
Total All Roads.....	527,067	494,510	440,899
Commodities			
Grain and Grain Products.....	24,423	25,368	20,514
Live Stock .....	14,931	14,232	13,431
Coal .....	121,650	140,900	89,644
Coke .....	6,743	6,630	4,361
Forest Products .....	17,877	12,656	13,690
Ore .....	3,736	1,903	3,605
Mdse. L. C. L. ....	155,179	154,290	150,441
Miscellaneous .....	182,528	138,531	145,213
December 23.....	527,067	494,510	440,899
December 16.....	554,832	515,769	581,170
December 9.....	537,503	520,607	613,621
December 2.....	495,425	547,095	636,366
November 25.....	581,347	493,318	558,798

Cumulative total, 51 weeks..... 28,510,288 27,774,651 36,648,522

### Car Loading in Canada

Car loadings in Canada for the week ended December 23 showed a seasonal drop from 38,888 for the previous week to 35,622, which was somewhat more than usual and the index number fell from 62.58 to 61.77.

	Total Cars Loaded	Totals Cars Rec'd from Connections
Total for Canada:		
Dec. 23, 1933.....	35,622	18,652
Dec. 16, 1933.....	38,888	18,574
Dec. 9, 1933.....	39,601	18,492
Dec. 24, 1932.....	31,763	17,339
Cumulative Totals for Canada:		
Dec. 23, 1933.....	2,002,796	942,260
Dec. 24, 1932.....	2,150,554	958,690
Dec. 19, 1931.....	2,544,061	1,264,459



# Interstate Commerce Commission Finds Railway Situation Improving

Legislative recommendations to establish fair competition to await Co-ordinator Eastman's reports

WASHINGTON, D. C.

BEFORE a condition of fair competition can be said to exist "it will be necessary that the various transport agencies pay the same rates of wages for comparable skill, render reliable service on a non-discriminatory basis, and bear an equal tax burden," says the Interstate Commerce Commission in its forty-seventh annual report to Congress, submitted on January 4, covering the year ended October 31. However, because the Federal Co-ordinator of Transportation, Commissioner Eastman, has these subjects under investigation and his recommendations when received are to be transmitted to the President and Congress by the commission, with its own comments, it does not in the annual report make any recommendations with respect to further legislation as it has in previous years. These will await the reports to be submitted to it by the Co-ordinator.

The commission is giving consideration, it says, to methods of bringing about a reversal of the present trend in railway financing and believes "that the desired results can be obtained, in part, at least, through the provision of sinking funds to be set up by the railway companies out of net income for the purpose of retiring a part of their funded debt before maturity." If such funds are not voluntarily established by the railway companies, their establishment "may be required as a condition of our authorization of further bond issues under the provisions of Section 20a of the interstate commerce act."

In various ways, the commission finds, "the railway situation has improved since our last report. With the progress of the national industrial recovery, railway earnings have increased, railway bonds sell at better prices, and in place of the most drastic curtailment of maintenance, attention is again being given to replacing worn-out rails and equipment."

It adds, however, that "the fact that other industries depend to a considerable extent upon the purchases by railway companies or their employees makes it highly desirable that so far as possible railway expenditure should at least fully supply current needs and begin catching up on deferred maintenance instead of waiting until recovery is in full swing." In a review of the railway traffic and earnings situation and on the financing situation the report says in part:

## Railway Earnings and Traffic

We have had occasion in previous reports to point out that the financial difficulties of the railways are the result of more than one cause. In large part they are the reflection of the reduction in traffic that came with the economic depression but also in considerable part they result from the competition of other transport agencies. In facing the conditions created by both of these causes, the railway managements have to consider how they can reduce operating costs, lower their charges, improve the speed, convenience, and safety of the services they render to the public, and eliminate unnecessary waste.

A survey of the freight revenue by months since the beginning of the year 1930 shows, except for seasonal variations, a down-

ward trend almost uninterruptedly to August, 1932. A temporary upturn then took place and continued until December, 1932, followed by a relapse to another low point in March, 1933. Thereafter the improvement has been marked with, however, a slackening in August of this year. These developments are conveniently followed in a table showing the freight revenue of each month as a percentage of that of the corresponding month in a base period taken as 100 per cent. It will be observed that the index fell from 95.4 in January, 1930, to 45.6 in August, 1932, rose to 54.1 in December, 1932, fell again to 44.1 in March, 1933, running to a high of 61.6 in July, 1933, and in September stood at 54.9.

Freight revenue of Class I steam railways by months, 1930-33, compared with the average revenue of corresponding months in the years 1927, 1928, and 1929 taken as 100 per cent (per cent of base period):

Month	1930	1931	1932	1933
January	95.4	78.2	58.8	50.6
February	92.3	72.6	57.7	47.6
March	87.2	73.5	56.6	44.1
April	92.5	75.9	55.6	48.2
May	88.9	71.0	48.7	52.1
June	87.0	73.8	48.7	58.5
July	89.1	74.5	46.1	61.6
August	82.9	65.4	45.6	56.4
September	84.7	63.0	50.0	54.9
October	80.9	60.7	51.2	...
November	78.6	60.3	51.4	...
December	80.7	61.6	54.1	...

These changes in freight revenue are mainly the result of fluctuation in tonnage, and only to a small extent of changes in the rates charged during this period.

The passenger-miles of 1932 were 36.7 percent less than those of 1930. The revenue per passenger-mile was 2 per cent less for the commutation business of 1932 than for that of 1930, and 17.1 per cent less for other passenger business, 1932 under 1930. The combined effect was to reduce the passenger revenue of 1932, 48.3 per cent below that of 1930. In the first 6 months of 1933, there has been a further fall of 25.5 per cent under that of the same period in 1932. However, in August and September, 1933, the passenger revenue slightly exceeded that of the same month of the preceding year. If the other than commutation passenger-miles be studied by months with corresponding months of 1927, 1928, and 1929 taken as 100, the index for the first quarter of 1933 was 35.9, for the second quarter 42.7; and for the month of August 1933, it was 51.2.

The drastic curtailment of operating expenses made in 1931 and 1932, almost in proportion to revenues, was continued in 1933, with the result that a relatively large recovery in net earnings has appeared in recent months. For the first quarter of 1933, the net deficiency after deducting fixed charges from total income, was for class I railways \$94,900,862, compared with a deficit of \$54,638,462 in 1932, and a deficit of \$1,492,215 in the same quarter of 1931; in the second quarter the net loss was \$6,809,385 for 1933, a net loss of \$70,675,771 for 1932; and a net income of \$32,649,320 for 1931; for the months of July and August, the latest for which the fixed charges are available the 1933 net income exceeded that of the corresponding months of 1931 as well as of 1932.

The employment of labor by the class I railways has been increasing in recent months, although it is still far below the predepression level. If the average employment of the respective months of 1927, 1928, and 1929 be taken as 100 per cent, index numbers show that the low month in the number of employees, not considering seasonal fluctuations, was May 1933, when the index was 54.7, compared with 58.5 for August, and 59.7 for September 1933. From these figures it appears that railway employment is still greatly curtailed. . . .

If the average maintenance expenditure per car-mile for the months of May, June, and July of the year 1930, amounting to 6.175 cents, in which there was probably no deferred maintenance, be reduced by 10 per cent to allow approximately for changes in wages and prices, and the result compared with the

actual per car-mile maintenance expenditures for the same months in 1933, it appears that the maintenance work in those months could justifiably have been stepped up over 25 per cent without considering the accrued deferred maintenance, amounting to possibly half a billion dollars for a volume of traffic reasonably in prospect.

More recently total maintenance expenditure has been increasing. In May and June, 1933, less was spent than in the same months of 1932, but in July, August, and September, 1933, the expenditure exceeded that of the same months of 1932, respectively, by 6, 15.9, and 13.5 per cent.

An important feature of railway recovery is a well balanced adjustment of railway charges, railway wages, and the general price level. We had occasion to consider the relation of the prices of commodities and railway freight rates in the General Rate Level Investigation of 1933. The evidence showed that while the rate level was high compared with the price level, it was impossible to require them to be brought together by a general rate reduction. Nevertheless, by the force of competition, carriers are voluntarily making reductions in rates and fares. It is obviously not desirable to restrict this competition insofar as it is conducted on a fair basis. However, before such a condition of fair competition can be said to exist, it will be necessary that the various transport agencies pay the same rates of wages for comparable skill, render reliable service on a non-discriminatory basis, and bear an equal tax burden.

### Retiring Debt

It has been the policy of railway companies to provide for their financial requirements largely through the issue of long-term bonds which at maturity are refunded. While the bonds are refunded the indebtedness evidenced by them is ordinarily regarded as perpetual and no provision is made for its ultimate liquidation. The result is that the funded debt of the railway companies is constantly increasing as their investment in railway properties is increased.

From December 31, 1919, to December 31, 1932, the funded debt of railway companies of Classes I, II, and III (and subsidiaries), outstanding in the hands of the public increased approximately 22 per cent or from \$9,773,239,469 to \$11,835,523,146. On the latter date the annual interest payable to the public on funded debt was approximately \$550,000,000. The average annual net railway operating income for the years 1920-32, inclusive, was \$842,955,000, or about 1.5 times the present interest requirements. The average rate of interest on the funded debt outstanding in the hands of the public is 4.65 per cent. It is not practicable, at present, to set up sinking funds applicable to the entire funded debt; perhaps not to a great portion of it. The possibilities are indicated, however, when it is realized that an accumulating sinking fund of one half of 1 per cent per annum, providing for calling bonds at par would retire the present debt if in effect for approximately 52 years.

The expense of refunding in the manner heretofore usually followed is considerable. More important is the danger that the maturity, if it occurs at a time when new or junior bonds are difficult or impossible to market, will cause trouble. Recent experience sufficiently illustrates this. The strain caused by heavy fixed charges in such a time as this is detrimental to service furnished the public. Naturally carrier executives try to prevent default on fixed obligations even if doing so may result in allowing the property to deteriorate and service to suffer.

### Rate Structure Investigation

Regarding the general investigation, No. 17,000, entitled "Rate Structure Investigation," the report says that during the past year arguments have been concluded in the parts covering salt and nonferrous metals, and the testimony has been closed in the reopened part relative to grain and its products. It is apparent, therefore, that the investigation, insofar as it relates to the separate important commodity groups, has been largely completed.

"In our last annual report we discussed the unwieldy proportions into which the docket No. 17,000 cases have developed. Experience has shown that necessary changes in the rate structure can be effected by us with the least delay (which is the mandate of the Hoch-Smith resolution) through the usual course of hearing complaints, or by investigations on our own motion, rather than under a general nation-wide investigation which is likely to assume unduly ponderous proportions. In view of all the circumstances we therefore entered an order on October 2, 1933, that except for the orders already

made in this proceeding or which may be entered in respect of such orders as supplementary or ancillary thereto, and except for those parts of the proceeding which have been heard, or upon which testimony is being heard, and not yet submitted, the general investigation be discontinued."

Referring to the "Marshalling and Distributing Plan" of the Railroad Credit Corporation the commission observes that "the lending period included the lowest levels of the current depression. It was fortunate, therefore, that the co-operative measures, consummated in the flexible loaning provisions of the plan, permitted extension of aid when no other source was available to the needy carriers. The low interest rates, being equivalent to the rediscount rate of the Federal reserve bank in the New York district, were also a great benefit to carriers forced to call upon the corporation for assistance.

### Reconstruction Finance Corporation Loans

Since the last report the commission had approved loans under the Reconstruction Finance Corporation Act aggregating \$89,576,344 upon applications filed by 24 carriers. The aggregate amount of loans approved under this act is \$436,405,523. Since work under this act was initiated in February, 1932, applications for loans have been filed by 145 carriers or their receivers or trustees. Loans to 81 of these applicants have been approved. For various reasons the commission was unable to approve loans on the applications of 41 others, and in 23 cases the applications were dismissed, usually with the consent of the applicants. Some of the carriers have received more than one loan. In a few instances the diminishing resources of the carriers and their inability to furnish acceptable security for additional loans, have required denials where earlier applications have been approved. "Due apparently to an improvement in business conditions affecting the carriers, the need for financing them under this act has diminished, as indicated by the declining number of applications and the withdrawal of others."

### Practices of Carriers by Railroad

Referring to the investigation in Ex Parte No. 104, Practices of Carriers Affecting Operating Revenues or Expenses, the report says that in Part I, Railroad Fuel, elaborate questionnaires were sent to Class I railroads. The returns were analyzed, and later extensive hearings were held, a report prepared, and findings proposed. Because the matters covered seemed to come peculiarly within the function of the Federal Co-ordinator, the report was referred to him. On October 6 the Co-ordinator referred this report, together with other matters having to do with carrier purchases, to each of the carriers' regional co-ordinating committees. Part II, Terminal Services of Class I Carriers, has been fully heard, briefs have been filed, and a proposed report is in course of preparation. An analysis of the returns to questionnaire filed by Class I Railroads in Part III, Construction, and/or Maintenance of Private Side Tracks for Shippers, was likewise prepared and referred to the Co-ordinator. An elaborate questionnaire was similarly submitted to all common carriers in Part IV, Traffic Expenses. While no report has been issued covering this subject, the returns to the questionnaire have been analyzed and tendered to the Co-ordinator for his consideration. Part V, Private Freight Cars, has been heard and after the filing of briefs a proposed report will be promptly issued. Part VI, Warehousing and Storage of Property by Carriers at the Port of New York, N. Y., was covered in a report issued last week.

Other parts have been under consideration and certain investigations were under way, but in view of the emergency transportation act, are being referred direct to the Co-ordinator for his information.

### Jurisdiction Over Foreign Transportation

Section 1 of the act should be amended, the commission says, so as to bring squarely within the provisions of the statute the transportation of passengers and property, and the transmission of intelligence, from a place in a foreign country through the United States to a place in a foreign country, insofar as such transportation and transmission occurs within the United States. Under the terms of that section the provisions of the act apply to the transportation of passengers and property, and the transmission of intelligence, "from or to any place in the United States to or from a foreign country," and "from any place in the United States through a foreign country to any other place in the United States," (sec. 1(1)) but they do not definitely apply to such transportation and transmission when from a place in a foreign country through the United States to a place in a foreign country.

"This hiatus in the statute, which was recognized in *United States v. Philadelphia & R. Ry. Co.*, 188 Fed. 484, has proved embarrassing to us in the enforcement of the act. Our attention has been called to cases which indicate that because of such hiatus carriers have seized upon the opportunity to grant concessions to shippers, in respect of transportation not subject to our jurisdiction, for the purpose of obtaining the routing over their lines of traffic which is subject to the act, and thereby have seriously curtailed their earnings. Practices of this character constitute an unfair method of competition as between carriers. They also have a damaging effect on the net revenue of carriers from business which is subject to the act, and for which we have to maintain a rate structure which will support an adequate system of transportation."

Following are excerpts from the report:

### Passenger Fares

In our last report we referred to the fact that we had addressed a communication to the presidents of all Class I carriers seeking their views as to whether by a general reduction in basic fares a betterment could be brought about in the volume of passenger traffic, and what suggestions they might care to offer for relieving the users of freight service from the burden due to unprofitable passenger service. A large proportion of them favored a reduction in the basic passenger fare. There was, however, a wide difference of opinion among those favoring a reduction in the basic fare as to the exact amount of the reduction. Those carriers opposing any reduction were practically all confined to the principal carriers operating in official territory.

We have taken no action thus far in the matter, largely because there seemed to be a determination on the part of a great many carriers to do something in the premises at an early date.

It would seem that with the constant decline for the past 10 years both in the number of passengers carried and the gross revenue from the passenger business, together with the constant increase by other competitive forms of transportation, the time is near at hand when some aggressive action should be taken by the carriers to determine whether it is possible to regain passenger business, or whether they shall be compelled to give up what at one time was a lucrative part of their business. [This was sent to the printer before the new reductions in the West and South were made effective on December 1.]

### Bureau of Finance

The following is a summary of applications filed during the year for certificates of public convenience and necessity under section 1 (18) to (22) of the act, and of the disposition made of applications:

Item	Number	Mileage
Applications filed:		
For authority to construct new lines or extend existing lines .....	12	491,290

Item	Number	Mileage
For permission to abandon mileage.....	153	3,263,216
For authority to operate or to acquire and operate....	40	1,536,114
<b>Total .....</b>	<b>205</b>	<b>5,290,620</b>
<b>Certificates issued:</b>		
Authorizing new construction.....	8	32,300
Permitting abandonment .....	129	2,404,264
Authorizing operation or acquisition.....	37	1,132,134
<b>Total .....</b>	<b>174</b>	<b>3,568,698</b>
<b>Applications denied:</b>		
For authority for new construction.....	5	23,770
For permission to abandon.....	2	33,970
For authority to operate or to acquire and operate....	5	37,364
<b>Total .....</b>	<b>12</b>	<b>95,104</b>
<b>Applications dismissed:</b>		
For authority for new construction.....	3	10,940
For permission to abandon.....	4	65,442
For authority to operate or to acquire and operate....	8	401,769
<b>Total .....</b>	<b>15</b>	<b>478,151</b>

Since the effective date of the act we have authorized the construction of approximately 9,692 miles of new railroad. We have granted a number of applications for extension of time for completion. Based on reports by carriers and on other available information, it appears that of the construction authorized, approximately 6,740 miles of road have been completed, and that projects aggregating about 1,442 miles have been abandoned or deferred. The remainder, about 1,510 miles, represents cases in which the specified completion periods have not expired.

The following tabulation shows by classes the respective amounts of securities authorized:

Class of security	Nominal issue	Conditional issue	Actual issue
Common stock .....	\$4,049,300.00		\$2,031,500
Mortgage bonds .....	74,837,000.00	\$338,053,800.00	\$93,401,500
Income debentures .....			4,124,000
Secured notes .....	7,855,653.99		7,874,000
Unsecured notes .....	867,060.35	2,106,546.27	27,590,563
Equipment-trust obligations .....		988,000.00	
Receivers' certificates .....			1,570,000
Trustees' certificates .....			15,000
<b>Total .....</b>	<b>\$87,609,014.34</b>	<b>\$341,148,346.27</b>	<b>\$136,606,563</b>

<sup>1</sup> Also 200 shares without par value.

<sup>2</sup> Includes \$7,039,500 of interim certificates.

Of the securities for actual issue \$1,824,800 of common stock, \$71,428,500 of mortgage bond, \$4,124,000 of income debentures, \$1,360,000 of secured notes, \$18,594,000 of unsecured notes, and \$1,320,000 of receivers' certificates, or a total of \$98,651,900, was authorized to be issued in exchange for or to pay, extend, or refund other outstanding securities. From the foregoing it appears that additional capitalization to result from the various authorizations is as follows: Nominal issue \$66,263,014.34, conditional issue \$67,175,046.27, and actual issue \$37,954,663.

During the period covered by this report many carriers have resorted to temporary financing to meet their current requirements. Of this amount \$104,765,929.45 was for renewal of notes previously issued and the remainder \$61,653,519.69 was to meet current corporate requirements.

### Bureau of Valuation

On June 16, 1933, amendment of paragraphs (a), (f), and (g) of section 19a of the act was approved. . . Paragraph (a), as now amended, leaves to our discretion the valuation of any such (electric) railway not operated as a part of a general steam railroad system of transportation. The amended paragraphs (f) and (g) relieve us of the necessity of revising and correcting the original valuations in "like manner" as employed in making the original valuations and affords us the power and opportunity of proceeding along more practical lines.

With original, or primary, valuations completed, our present valuation activities fall under the direction of the above referred to amendments. To meet such requirements the bureau is perfecting a perpetual current inventory of the property of each carrier. This has been accomplished to such an extent that the bureau is now in a position to furnish the valuation elements specified by the act within a period of 60 days which, it is expected, will, during the next year, be reduced to 30 days or less. The bureau also is perfecting original cost records and estimates and bringing to currency the investment records. As the result of recording all reconstruction and replacements in the perpetual inventory, the record of original cost, which a few years ago was largely unknown, now is a known factor to the extent of approximately 70 per cent. Continuation of the valuation processes will ultimately result in complete original cost and investment records.

### Reduction of Force

The amendment, together with repeal of provisions of section 15a relating to excess net railway operating income, greatly sim-

plify the valuation work. For the last fiscal year (1932-33) the appropriation for the bureau was \$2,750,000. Its personnel on June 1, 1933, consisted of 910 employees. The appropriation for the current fiscal year (1933-34) is \$1,000,000, and its active personnel on July 1, 1933, consisted of 381 employees.

### Summaries of Final Values and Elements of Value

We have reported heretofore the completion of the original valuations of all steam railroads. The dates of these valuations range from June 30, 1914, to June 30, 1921, the average date being June 30, 1916. For the convenience of the public and other interested parties we are separately publishing in tabular form the final value and the separate elements of value of each carrier as determined in the original valuations.

As of original valuation dates (average date, June 30, 1916), we found the value for rate-making purposes of the total owned property to be \$16,234,983,540, excluding working capital, and the value of the total used property to be \$16,475,469,658, excluding working capital, and the total working capital to be \$431,041,847. Cost of reproduction new of the total owned property and total used property was found to be \$16,104,270,137, and \$16,281,545,213, respectively. Cost of reproduction less depreciation of the total owned property and the total used property was found to be \$13,351,414,883 and \$13,487,343,559, respectively. Present value of the total owned lands and rights and total used lands and rights was found to be \$2,734,935,586, and \$2,840,445,771, respectively. A present value of \$536,810,276 was found for the lands, rights, and structures owned by the carriers but not devoted to carrier use.

In *Ex Parte 74, Increased Rates, 1920*, we found the value of the steam-railway property, for the purposes of that case, to be approximately \$18,900,000,000 as of the date of that report and order, July 29, 1920. Since that time large additions to the property have been made. In Docket No. 26000, *General Rate Level Investigation, 1933*, the bureau computed the cost of reproduction new of the steam-railway property other than land of the carriers in existence on December 31, 1932, as \$23,953,546,235 at period prices as of June 1, 1933, and \$23,742,958,869 at spot prices as of that date. Cost of reproduction less depreciation was computed as \$17,754,467,309 at period prices and \$17,599,113,778 at spot prices. Original cost, except land, was placed at \$22,860,365,394. The present value of lands and rights as of June 1, 1933, totaled \$3,032,799,826. Necessary working capital, including material and supplies, was computed as \$338,854,000.

### Bureau of Accounts

Upon the enactment of the Emergency Railroad Transportation Act, 1933 (sec. 15b of the Interstate Commerce Act), retroactively repealing the recapture clauses of section 15a we ceased our so-called "recapture" examinations, thus enabling our bureau of accounts to resume the performance of its normal functions, the nature and importance of which, as related to our duties under the act, were explained at length in our last report and need not again be stated here.

While the bureau has returned to its regular duties, its effectiveness has been much impaired through the necessity of greatly reducing its personnel because of a severe cut in the appropriations for its work.

### Bureau of Traffic

Rate adjustments were protested and suspension asked in 461 instances, a decrease of 165 under last year. Of these protested adjustments, 245 represented reductions, 172 represented increases, 25 represented both increases and reductions and 19 neither increases nor reductions. They covered not only a large number of rate schedules but many thousands of rates.

The following action was taken on the requests for suspension:

Suspended (including supplemental orders).....	105
Refused to suspend.....	232
Schedules rejected, requests for suspension withdrawn, or protested schedules withdrawn.....	124
	461
Proceedings pending from previous year.....	196
New proceedings on suspension docket.....	98
Total.....	294

Of this number, 168 were disposed of, a decrease of 6 under last year, 121 after formal hearing and report, and 47 through informal proceedings without report.

### Statistics

The length of steam railways (first track) in the United States continues to decline, having been 247,595 miles at the close of 1932, compared with 250,413 10 years earlier. The mileage operated by Class I railways was 1,247 miles less in August, 1933, than in August, 1932. The miles of second or

additional main tracks also began a downward trend in 1932. The number of locomotives in service declined by 1,920, the number of freight cars (excluding caboose) by 61,214, and the number of passenger-train cars by 1,498 during 1932. The average tractive effort of the locomotives was 23.66 per cent greater and the average capacity of the cars 9.05 per cent greater than 10 years earlier.

The total railway capital increased slightly during the year 1932, and the ratio of debt to capital remained at 56 per cent, the same as in 1931, and approximately the same as 10 years ago. Dividends averaging 1½ per cent on all stock outstanding were declared, although not earned in the aggregate. The book investment in the road and equipment operated by the line-haul companies was 26 billion dollars, without working capital, or \$106,337 a mile, at the end of 1932. Retirements exceeded new investment during 1932.

### Bureau of Formal Cases

The formal complaints filed numbered 741, of which 621 were original complaints and 120 subnumbers, a decrease of 230 as compared with the previous period. We decided 1,234 cases and 208 have been dismissed by stipulation or on complainants' request, making a total of 1,442 cases disposed of, as compared with 1,428 during the previous period. Approximately 213 formal and I. & S. cases have been reopened for further hearing and reconsideration. We conducted 1,028 hearings and took approximately 184,476 pages of testimony, as compared with 1,192 hearings and 239,812 pages of testimony during the preceding period. The following statement shows certain facts with respect to the condition of this docket as of October 31 of the years indicated:

	1930	1931	1932	1933
Formal complaints filed.....	1,153	828	825	621
Subnumbers.....	259	193	146	120
Investigation and suspension cases instituted..	153	120	175	98
Cases under submission at end of period:				
Regular docket.....	687	419	363	369
Shortened procedure.....	88	82	81	46
Cases disposed of including subnumbers and reopened cases.....	1,825	2,030	1,719	1,773
Number of pending cases.....	2,352	1,904	1,783	1,460

### Delegation of Authority

Acting upon our recommendation the Congress, by an act approved February 28, 1933, added paragraph (6) to section 17 of the Interstate Commerce Act, and thereby gave us authority, to assign or refer any portion of our work, business, or functions to an individual commissioner, or to a board composed of an employee or employees of the Commission, provided, however, "that this authority shall not extend to investigations instituted upon the Commission's own motion or, without the consent of the parties thereto, to contested proceedings involving the taking of testimony at public hearings."

Under this authority, effective November 1, 1933, we further reorganized our administrative machinery.

It is expected that the removal of these duties from the attention of the Commission in the first instance will leave us free as a body, and in our several divisions, to give greater individual attention to the more important matters of regulation which from time to time come before us. Pending further experience, we have not as yet assigned any duties to boards of employees, as permitted by section 17 (6), but the several boards which have long functioned as administrative aids to the Commission will continue as in the past.

A more detailed report of the work of the Bureau of Safety is published as a separate document. In the year ended June 30, 1933, it says, "The increased safety to the traveling public deserves special mention. Steam railroads carried 480,717,777 passengers 16,997,426,362 miles with but 23 fatalities or 1 for each 739,018,537 miles traveled."

The number of derailments investigated by the Commission is ordinarily about one-third of the total number of accidents investigated. During the past few years, however, derailments have accounted for an increasing percentage of the total number investigated and during the instant year more than half of the accidents investigated were derailments. Five of these derailments were due to the failure of arch-bar trucks.

At the request of the Co-ordinator the Bureau of Service is participating in the investigation of matters pertaining to labor relations, maintenance of equipment, consolidation of shops, economy of operation, and accessorial services which carriers perform.

# Propose New Passenger Terminal for Chicago

Railroad committee of city council offers plan for station east of Michigan avenue at Randolph street

THE latest plan, which must be added to the long list of studies that have been made during the last 20 years, for a union passenger station at Chicago has just been issued in the form of a report prepared by Edward J. Noonan, consulting engineer for the Committee on Railway Terminals of the common council of that city. The particular occasion for the presentation of a new terminal plan at this time is outlined in the letter of transmittal to Edward J. Kelly, mayor of Chicago, in which attention is directed to the changed status of the railways by reason of the legislation creating the position of federal co-ordinator of transportation, and leading to the appointment of a regional director, "who, in co-operation with the representatives of the railroads, is now studying the railway terminal

problem at Chicago." "It would seem, therefore," the letter continues, "that this is the proper time for the city to consider this subject in order that the railroad co-ordinator may be advised of the civic problems present."

The plan provides for the use of a site on Illinois Central property east of Michigan boulevard and extending from some distance south of Randolph street to the south bank of the Chicago river, and proposes that the station be used by all the railways now provided with passenger terminal facilities in the Central, Grand Central, LaSalle Street and Dearborn stations, in addition to the Alton which is now a tenant in the Union station. In other words, the proposed station would replace all existing stations except the Union station and that of the Chicago & North Western. The railways



Chicago Aerial Survey Co.

An Aerial View of Downtown Chicago As Seen from the Southwest, Showing the Railway Occupancy South of the Business District  
(1) Chicago & North Western Station, (2) Union Station, (3) Grand Central Station, (4) La Salle Street Station, (5) Dearborn Station,  
(6) Central Station, (7) Site of the Proposed Station.

that would be required to give up their present facilities for the proposed station, under this plan, are as follows:

- From the Union Station
  - Alton
- From the Grand Central Station
  - Baltimore & Ohio
  - Pere Marquette
  - Chicago Great Western
  - Minneapolis, St. Paul & Sault Ste. Marie
- From the LaSalle Street Station
  - New York Central
  - Chicago, Rock Island & Pacific
  - New York, Chicago & St. Louis
- From the Dearborn Station
  - Chicago & Eastern Illinois
  - Grand Trunk Western
  - Chicago, Indianapolis & Louisville
  - Wabash
  - Chicago & Erie
  - Atchison, Topeka & Santa Fe
  - Chicago & Western Indiana
- From the Central Station
  - Illinois Central
  - Michigan Central
  - Cleveland, Cincinnati, Chicago & St. Louis

While the proposed project is fostered by the city through its Railway Terminal committee, the plan now offered is substantially a modification of that proposed by the Illinois Central for a passenger terminal at Roosevelt road, which received the sanction of the city in a contract ordinance passed by the city council in 1919. However, owing to the failure of railways using the other "south side" terminals to accept the Illinois Central's invitation to use its proposed station, the project has remained dormant since its inception.

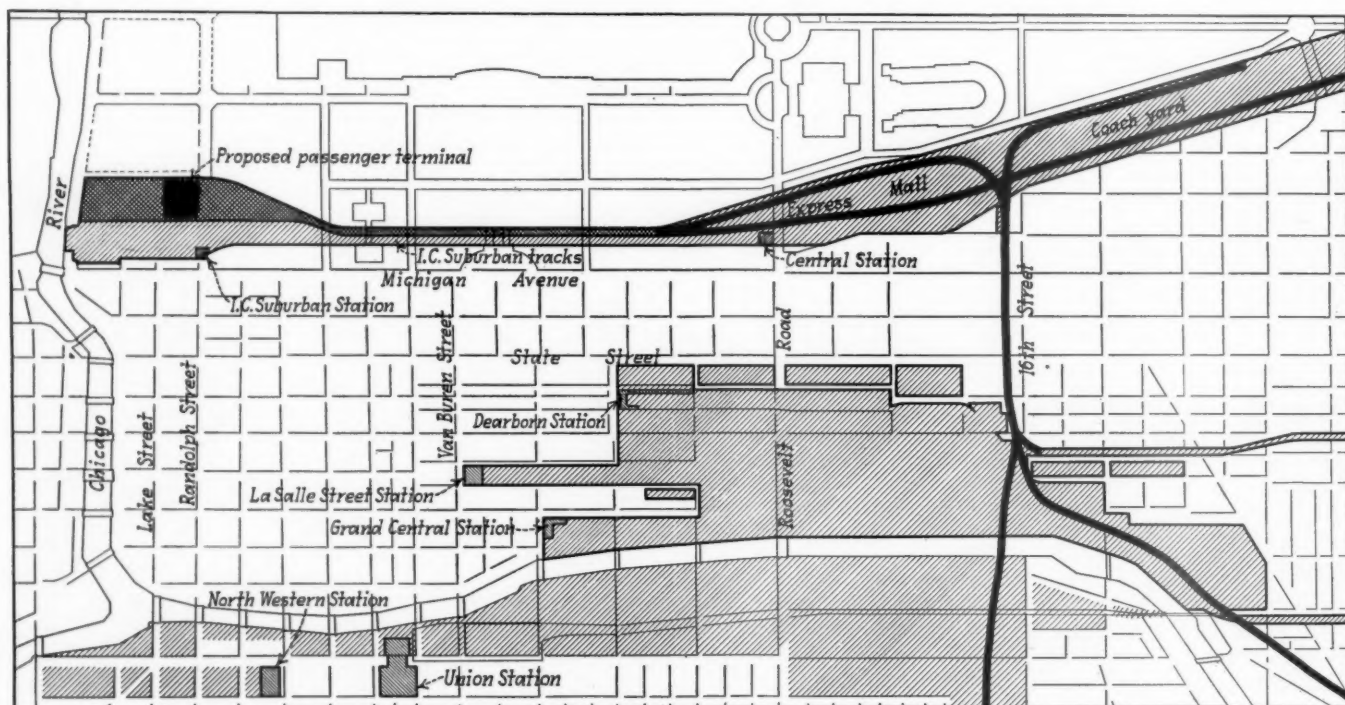
One of the chief objectives sought in promoting the new plan is a civic improvement project that has been advocated for years by the municipal authorities and city planners, namely, to decrease the utilization by the railways of the large area between State street and the south branch of the Chicago river from as far north as Van Buren street, south to Sixteenth street, which area has long been occupied by passenger and freight

stations, team yards, etc. Because of the development of this area for railway terminal purposes years ago, a considerable number of streets are interrupted at its borders, and it is the contention that the character of the present use of the property in this area, together with the interruption of what are deemed necessary through north and south streets, has resulted in a throttling of the normal development of Chicago's main business center or "loop district." It is suggested that the release of the property now used for passenger stations in this area would permit of an effective correction of this condition.

This same objective was set forth in advocating some of the earlier plans for new terminals to accommodate the roads using the existing south side stations, and in particular by the exponents of the Illinois Central's project for a station east of Michigan boulevard at Roosevelt road. However, the new plan is now offered as possessing a number of advantages that should make it more attractive than the Roosevelt Road plan. Among these is the fact that the site, just south of the Chicago river, is available for development, because its former use as a delivery yard supporting the South Water street fruit market has been abandoned because of the removal of the market to another location. Attention is directed also to the intensive development in recent years of property tributary to this site for high-grade office buildings. In other words, the "loop district" has expanded to the north rather than to the south, so that a station at Randolph street would be closer to the focal center of the business district than a station at Roosevelt road.

### The Station Plan

The report of the Terminal committee, which comprises a bound book of more than 100 pages, contains tentative plans for the station layout that provide for a station of the stub-end type, but of a two-level design, with the headhouse located at an upper level above a group of 20 station tracks. The report states that



Map of Chicago's Downtown Business District Showing the Location of the Proposed Station in its Relation to the Existing Passenger Terminals and Indicating by Hatched Lines the Railway Occupancy of Property Adjacent to the Business District. Suggested Rail Approaches shown in Heavy Lines

traffic studies indicate that 20 tracks would be sufficient to accommodate all of the through passenger trains of the railroads tentatively included in the plan, when passenger traffic was at its peak, and that 12 station tracks would accommodate the traffic of these railroads during 1932. This headhouse would be located a short distance east of the Illinois Central's Randolph Street suburban terminal, in the block between East Randolph street and East Lake street. As the streets surrounding the station must necessarily be supported on viaducts, it is proposed to construct these in accordance with a two-level plan, the upper level to be used for main thoroughfare traffic, with ramps on the streets east and west of the station communicating with the lower level, which would coincide with the concourse, or main-floor, level of the station building.

The drawings of the station contemplate a monumental design of a modified classic motif, with but limited space for offices. The arrangement of tracks and platforms indicated on the track-level plan calls for separate baggage and passenger platforms, with baggage elevators providing access to a large space for a baggage room on a level with the concourse, but north of the main headhouse structure.

#### How the Railroads Would Reach the Station

The report also includes several general and detailed maps indicating routes over which the railroads that now use the Grand Central, LaSalle, and Dearborn stations would be provided with convenient access to the proposed station at Randolph street. These suggest that the Chicago Great Western, the Soo Line, the Rock Island, the New York Central, the Santa Fe and the Alton could be routed over the St. Charles Air Line (a short east and west line in the vicinity of Sixteenth street), while the other railroads that now use the Dearborn station would be routed over the Illinois Central from connections at various points in the Lake Calumet or South Chicago districts. Alternate plans suggest possible variations in the routes and connections.

Another feature of the plan is the development of extensive coach-yard, mail and express facilities on existing Illinois Central property south of Roosevelt road. Attention is directed to the fact that with a coach-yard at this point, operated in connection with a station at Randolph street, a marked reduction in the movement of coaches to and from the station would be effected, compared with the coach movements involved in connection with the operation of the existing stations.

The estimated cost of the station at Randolph street, including the coach, mail and express facilities, is \$19,000,000 and it is also estimated that the use of this station by the railroads would result in an operating saving of \$3,000,000 per annum. This figure is based on a saving of \$1,250,000 in interest on the investment in the facilities now used, and implies that these old properties could be disposed of without a capital loss.

The report offers the following summary of advantages of providing a station at Randolph street.

(1) The land for such a terminal would be on the lower level of property which will ultimately be utilized for air-right development;

(2) The existence of such a terminal would enhance the value of air-right properties;

(3) The land needed for station tracks and facilities should be obtained at a minimum figure and at a lower value than the land now occupied by existing stations;

(4) The station facilities at Randolph street which will be below street level can be provided at a minimum figure because it will not be necessary to expend large sums for monumental buildings;

(5) The actual expenditures necessary to produce station facilities at Randolph street to accommodate all of the railroads using the Grand Central, LaSalle street, Dearborn street and Central stations, will not be much more than the investments of the railroads in buildings and facilities in these stations;

(6) The total cost of the terminal, including the land, will not be more than one-half of a reasonable valuation that might be fixed for the existing stations;

(7) The railroads, by consolidating in a passenger terminal at Randolph street, can place themselves in a position to render superior service at a minimum operating cost, much less than the cost of rendering this service in their present locations;

(8) A passenger terminal can be fully constructed and ready for occupancy on property of the Illinois Central at Randolph street without in any way interfering with the operation or rendition of service of present passenger or freight facilities of any railroad.

Thus far, no statements have been given out by the railroads which it is suggested could be served by this terminal, but the Railway Terminal committee of the city council is planning a series of hearings for the purpose of ascertaining the position of the various railroads with respect to this proposed plan.

## Agreement Reached on \$77,000,000 Loan to P. R. R.

WASHINGTON, D. C.

THE large possibilities for increased business and employment in 1934 to result from P.W.A. loans for railroad maintenance and equipment took on a more tangible aspect when contracts were signed on December 29 for a loan of \$77,000,000 to the Pennsylvania for the completion of its electrification work between Philadelphia and Washington and for the building of 7,000 freight cars and 101 electric locomotives. It is estimated that this will create 45,000,000 man-hours of work to begin at once for employees of the Pennsylvania and of the manufacturers and fabricators of material spread



Signing of Contracts with the Pennsylvania Railroad under which the Public Works Administration Will Loan That Company \$77,000,000

Left to right—A. J. County, vice-president, Pennsylvania Railroad; B. V. Cohen, associate general counsel of PWA; Administrator Harold L. Ickes (seated); Henry J. Hart, assistant counsel of PWA, and Frank C. Wright, director of Division of Transportation Loans of PWA.

through 23 states in addition to other indirect employment.

The contracts were signed by H. L. Ickes, public works administrator, and A. J. County, vice-president of the Pennsylvania, just as the government offices were closing for a three-day New Year holiday, after several weeks of negotiations over the terms of the loan, for which an allotment of \$84,000,000 was made by the Special Board for Public Works on November 2. The reduction in amount was made on account of some work which the Pennsylvania now plans to finance otherwise or defer for a time, presumably because it does not come under the head of "maintenance," including some tunnel improvements and the conversion of electric locomotives and passenger cars. Approximately \$45,000,000 of the amount will be expended in connection with the electrification work and approximately \$32,000,000 for the new cars and locomotives.

Security for that part of the loan used for new equipment will be equipment trust notes and the funds used for electrification work will be secured by pledge of underlying stocks and bonds now held in the Pennsylvania's treasury. The entire loan will bear 4 per cent interest but no interest will be charged for the first year. Much of the time required for the negotiations was required to readjust many contracts previously made to bring them into conformity with the labor requirements of the national industrial recovery act. The contracts covering the Pennsylvania loan were the first to be completed on allotments authorized by the P.W.A. board in the last two months totalling nearly \$200,000,000, including the blanket allotment of \$51,000,000 for rails and fastenings and separate allotments to 15 roads for rails, new equipment, maintenance of equipment and other expenditures.

In making the announcement Administrator Ickes said the agreement "permits the largest private construction job in the United States to go ahead immediately, for concurrently with the negotiations on the contracts the Pennsylvania has been preparing for immediate large-scale resumption of work on its electrification program." The project is particularly adapted to the P.W.A. employment program, he said, in that "the federal money will go practically 100 per cent for wages and materials and it will be of direct widespread benefit in aiding heavy industries and capital goods production."

"This loan creates employment and purchasing power from coast to coast," Mr. Ickes said. "The Pennsylvania Railroad will call thousands of its men back to work in the shops and on the right of way. They will assemble the cars and build electric locomotives in the shops at Altoona, Pitcairn and Enola, Pennsylvania; and along the right of way from Washington to Philadelphia they will erect the structures and install the equipment that is necessary for electric operation. The estimate of 45,000,000 man-hours of employment includes only the work to be done by the employees of the Pennsylvania Railroad and by the employees of manufacturers and fabricators of material. It does not take into account the great amount of indirect and industrial employment that will be created by producing, processing and transporting raw materials, for no accurate estimate of that can be made. Work can begin immediately, for the Pennsylvania has plans and schedules of work prepared and is resuming construction on a job that is partially completed and which it was compelled to suspend because of economic conditions. Officials of the Pennsylvania have co-operated with the officers of the Public Works Administration to the fullest extent in the negotiations on the terms of its contracts, in a mutual effort

to get the job under way and men back on the payrolls at the earliest possible moment."

Included in the work that the Pennsylvania will finance otherwise or defer for a time are the necessary changes in the Union tunnel in Baltimore and the Virginia avenue tunnel in Washington to permit the use of electric locomotives through them, the conversion of a number of direct-current locomotives for the use of alternating current, and the conversion of a number of steam passenger cars into electric multiple-unit cars.

Employees of the Pennsylvania Railroad Company will assemble the 7,000 new freight cars and a number of the new electric locomotives in the company's own shops, and they will also erect the electrical transmission system and install the necessary equipment for electrical operation. Their wages, hours and working conditions will be governed by the applicable contracts between the company and the various crafts of employees, all in accordance with the railway labor act.

Unskilled labor, it was agreed, shall not be paid less than the \$15 a week minimum required to be paid on projects being constructed under P.W.A. regulations. Some of the electric locomotives will be built by outside manufacturers, and the wages and hours of labor of their employees will be governed by the applicable NRA codes. The contracts also contain provisions requiring that all new material and equipment used by employees of the Pennsylvania and by outside manufacturers shall be purchased from concerns which are abiding by the NRA codes governing their respective industries.

The Pennsylvania will make reports to the government monthly on forms that will be furnished by the Department of Labor, showing separately the number of employees engaged on the electrification work and on the locomotive and car building jobs, together with the aggregate amount of the payrolls on each of the three classes of work, the man-hours worked, and the total expenditure for materials. The company will also report to the Department of Labor the names and addresses of all persons, firms or corporations with whom it makes contracts for the purchase of materials or equipment to be paid for with this loan.

The Pennsylvania first began work on this project on a comprehensive scale in 1929. When completed, it will represent an investment of \$108,000,000, exclusive of related terminal developments at Philadelphia, Newark and Baltimore which will cost another \$100,000,000 when completed. The original construction schedule, formulated in 1928, called for financing the work largely out of earnings. Under that schedule the work was to have been spread over a period of six to eight years. However, adverse traffic conditions in 1930 restricted earnings and compelled curtailment.

In 1931, in consonance with efforts being made then to stimulate national industrial recovery, the company announced that it would borrow money to carry on the work and accelerate the schedule so as to complete it within two years. For that purpose, the company borrowed \$77,000,000. The work was pushed vigorously in 1931, in anticipation of completing both the electrification and all related terminal developments in 1933. However, the \$77,000,000 borrowed in 1931 was not sufficient for that purpose, and all work subject to suspension was discontinued in January, 1932.

After the Reconstruction Finance Corporation was organized in 1932, the Company borrowed \$27,500,000 from it, and construction work was concentrated on the section between Wilmington and New York city, but the R. F. C. loan was paid off in July and the work was largely discontinued.

Electric operation of passenger trains between Philadelphia and New York was begun in February of this year, and in March electric operation of all trains between Wilmington and New York was commenced. By April all through trains between New York and the west were operated electrically as far as Paoli, Pennsylvania, a station about 20 miles west of Philadelphia.

The signing of the Pennsylvania contract followed by one day the allotment of \$27,534,000 for loans to six railroads which were briefly reported last week.

The Southern Pacific was allotted \$12,000,000 to be used for rail and fastenings, cross ties, repairing bridges and culverts and reconditioning locomotives and cars. This allotment will create 10,160,000 man-hours of direct employment, spread over nine states, for the forces of the Southern Pacific during the year 1934, it is estimated.

The Illinois Central was allotted \$9,300,000 for new rail, repairing bridges and reconditioning equipment. Approximately 4,500,000 man-hours of direct employment for employees of the Illinois Central will be created. Among the items are approximately \$6,526,000 for repairing freight-train cars; \$1,000,000 for repairing passenger-train cars; and \$1,037,000 for rebuilding the Big Clifty viaduct at Big Clifty, Kentucky, and rebuilding the approaches to the Cairo bridge over the Ohio river on both the Kentucky and Illinois sides of the river.

The Baltimore & Ohio was allotted \$4,230,000 for rail, building 820 new coal cars and making repairs on 5,000 freight cars and 240 locomotives. It is estimated that this will create 2,290,000 man-hours of direct employment for B. & O. forces during the next six months.

The receivers of the Wabash were allotted \$1,489,000 with which to purchase rail and fastenings and to repair and modernize equipment. Approximately 1,500 cars are involved in the repair and modernization program. It is estimated that Wabash employees will receive 1,400,000 man-hours of direct employment as a result of this allotment. The receivers will pay the wages of labor engaged in laying the new rail out of their own funds, and the allotment does not include any money for that purpose.

The Kansas, Oklahoma & Gulf was allotted \$265,000 for the purchase of rail and fastenings. It will use its own funds for laying this rail.

The Interstate was allotted \$250,000 for rebuilding 500 coal cars in its own shops at Andover, Virginia, where 130,000 man-hours of labor for its employees will be provided.

The allotments were made subject to obtaining the requisite approval of the Interstate Commerce Commission and negotiation within a reasonably short time of contracts satisfactory to the Public Works Administration.

On January 3 the Pennsylvania filed its application to the Interstate Commerce Commission for approval of the proposed expenditures, showing the details of the \$45,000,000 required to complete the electrification work. Completion of the electrification, the application stated, will enable realization of the full amount of estimated expected economies from electric operation, freight and passenger, between New York and Washington. This estimate is \$7,209,000 on the basis of 1931-1932 winter traffic. Of the total \$17,000,000 is for the construction of 5,500 box cars and 1,500 flat cars, while approximately \$15,000,000 is for 28 passenger locomotives, 59 freight locomotives, and 14 switching locomotives. Of the locomotives, 11 passenger and 14 switching will be built in the company's shops while others will be built in outside shops. Another application was filed for authority to issue \$45,000,000 of 30-year secured 4 per

cent serial bonds and to pledge certain stocks and bonds as collateral security therefor and to assume obligation and liability in respect of \$32,000,000 of 4 per cent equipment trust certificates.

Joseph L. White, H. J. Hart, F. Q. Brown, Jr., James Homire, Henry Herman, and Edward N. Abbey are assisting Frank C. Wright, director of the Transportation Loan Division of the P. W. A., and its legal department as financial and legal advisers in connection with the handling of railroad loans.

Standard and general forms of contract for rail and equipment loans have been worked out by the P. W. A. legal division and have been circulated among the railroads, some of which have objected to some of the requirements. It is understood that the present forms are not necessarily final but are to be used as the basis for agreements and may be varied from in some particulars. Many of the provisions are the same as those announced for the Pennsylvania loan contract.

The rail contract provides that each contract for the purchase of rail shall provide for final delivery by September 1, unless the vendor is prevented by causes beyond its control. Each contract is to provide that the vendor shall accept and comply with and agree to be bound by the applicable approved code or codes of fair competition adopted under the national industrial recovery act for any trade or industry or subdivision thereof within which any part of the contract to be performed by the vendor falls or, if there be no such approved code of fair competition, with the provisions of the President's Reemployment Agreement, irrespective of its expiration date. Each contract is also to include a provision that in the event any such code is violated by the vendor, the railroad company shall have the right to terminate it. Each vendor is to make monthly reports to the Department of Labor and the railroad is to furnish that department with the names of those with whom it makes contracts. The notes for the loans are to be designated as the railroad's "Four Per Cent Registered Serial Notes," or appropriate designation and are to be payable in eight instalments beginning January 1, 1937. The railroad company is to agree that it will take reasonable steps to aid in the sale by the government of the notes and that the notes shall be entitled to have the highest rank and order of security, lien and priority to which they are or shall be entitled for such purposes at law or in equity and/or under any present or future statutory law of the United States or of any state.

Somewhat similar provisions are included in the equipment contract.

The New York, New Haven & Hartford has applied to the Interstate Commerce Commission for approval of the expenditure of \$1,350,000 for the purchase of 25,000 tons of 112-pound rails and 10,000 tons of fastenings, to be used chiefly in main track between New York and Boston in replacement of 107-pound rail, with the proceeds of a loan from the P. W. A. It has also applied for authority to issue its promissory note for the amount.

The receiver of the Waco, Beaumont Trinity & Sabine has applied to the P. W. A. and to the Interstate Commerce Commission for a loan of \$5,000,000 to complete its proposed extensions between Livingston, Tex., and Beaumont and between Weldon and Normange for which it has repeatedly sought loans from the Reconstruction Finance Corporation without success.

The P. W. A. has made a definite allotment of \$1,400,000 to the Chicago & Northwestern for the purchase of 25,000 tons of rails and the necessary fastenings. The commission had approved an expenditure of \$3,461,913 for 65,000 tons of rails and 18,000 tons of accessories and fastenings.

# Railway Purchases Show Gains

Preliminary figures for 1933 exceed expectations—Increases in repair materials general—Inventories smaller

It is a significant fact that while business is becoming increasingly engrossed with plans and projects of the federal government for the purpose of creating employment and restoring buying power, the railroads of the United States, sometimes referred to as industry's best customer, are doing a not inconsiderable amount of buying in the markets of the country on their own account and, despite difficulties that have properly begun to challenge the more attentive interest of government, have caused increases to be made in their purchases for several months that are large enough to spread cheer among those railway men who are immediately responsible for the safe operation of the properties as well as among those manufacturers whose mills are tuned to railway production.

Complete statistics regarding railway purchases for the past year are not yet available and will not be available for some time. Purchases made during the first 10 months of the year by railroads earning 93 per cent of the total operating revenues, together with the best available information since that time, however, indicate that the railroads purchased fuel and supplies last year to the approximate amount of \$450,000,000. This is exclusive of locomotives and equipment and material purchased by contractors of railway work.

As railway purchasing goes, \$450,000,000 is not a large figure. Dollar for dollar, it is \$245,000,000 under corresponding expenditures in 1931, \$590,000,000 under 1930, \$880,000,000 under 1929, and about \$945,000,000 under the average amount spent per year for like purchases in the five years previous to 1929. Considering the times, it is, nevertheless, an imposing sum of money to be spent wholly for materials—a sum that looks large even when compared with that portion of the "Public Works" money which was actually expended during the same period for materials and supplies.

## Expenditures Higher

The interesting fact about these purchases, however, is that they appear to have exceeded by \$5,000,000 the purchases made in the previous year. It is the first

time anything like this has happened since 1929. Although, with the small difference that exists between the figures for 1933 and those for 1932, the actual purchases in November and December may fall so far short of estimates as to wipe out the reported increase, instead of widening the margin as now seems the more probable outcome, and while more consideration of relative prices than is possible at this time would have to be made to determine the extent to which the difference between expenditures reflects differences in quantity, it is to be observed that the purchases in question were, taken as a whole, considerably larger than could have been anticipated by the rate at which the railroads were acquiring supplies earlier in the year and show a reversal of the

Railway Purchases—1933\*

	Fuel	Cross Ties	Other Material	Total	Total Less Fuel
January .....	\$15,300,000	\$1,850,000	\$16,150,000	\$33,300,000	\$18,000,000
February .....	14,000,000	2,000,000	14,100,000	30,100,000	16,100,000
March .....	13,900,000	2,250,000	15,750,000	31,900,000	18,000,000
April .....	12,000,000	2,160,000	14,840,000	29,000,000	17,000,000
May .....	12,750,000	2,120,000	16,430,000	31,300,000	18,550,000
June .....	12,300,000	2,360,000	18,340,000	33,000,000	20,700,000
July .....	14,500,000	2,700,000	21,800,000	39,000,000	24,500,000
August .....	16,500,000	2,500,000	26,000,000	45,000,000	28,500,000
September .....	15,650,000	2,550,000	22,300,000	40,500,000	24,850,000
October .....	15,700,000	3,200,000	24,100,000	43,000,000	27,300,000

\* Subject to revision.

downward course that railway buying followed for three and a half long years.

Fuel purchases last year, the estimates show, amounted to approximately \$167,000,000, or 37.2 per cent of the total; while approximately \$25,000,000, or 5.5 per cent of the total, was spent for cross ties; \$9,200,000, or 2.2 per cent for rail; and \$248,000,000, or 55.1 per cent, for indeterminate quantities of lumber, car and locomotive materials, train supplies, track and building materials, oils, electrical materials and the supplies required for operating and maintaining the railway plant. The divisions of the supply dollar last year indicate reductions in the outlays for both ties and rails, notwithstanding the drastic declines in their consumption

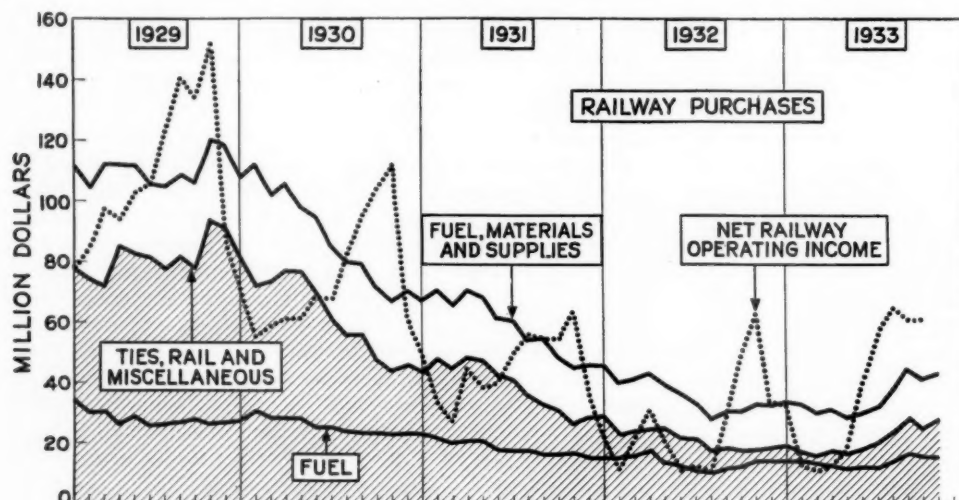
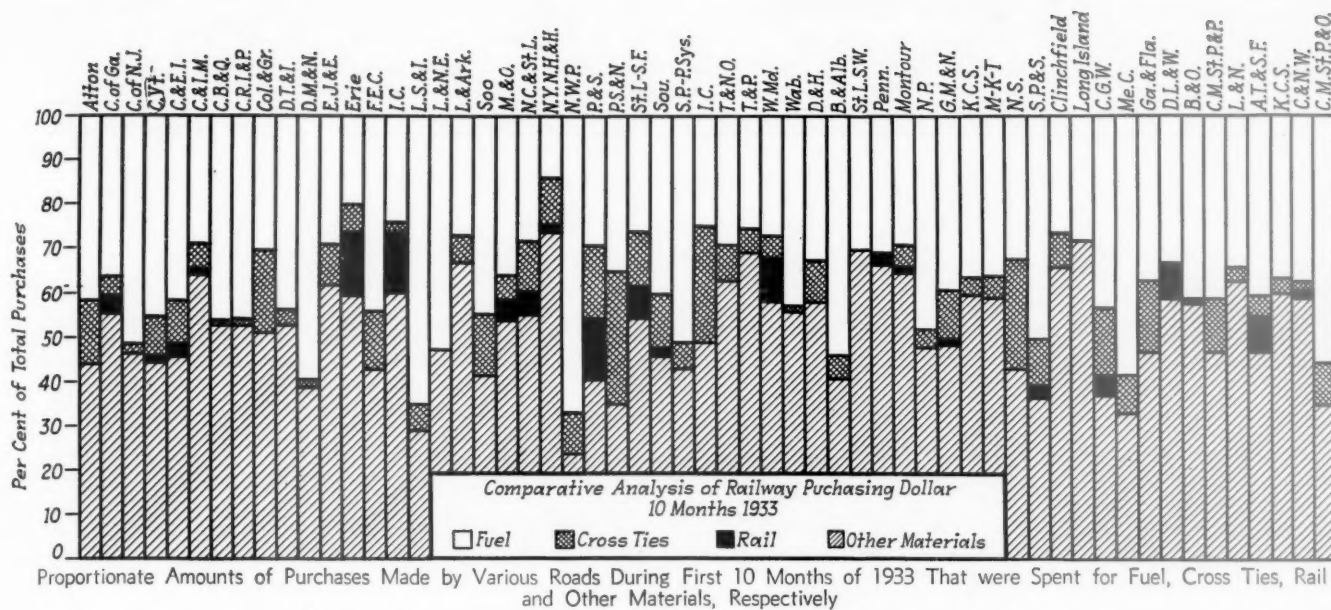


Chart Showing the Expenditures Made by the Class I Railways for Materials and Supplies, Month by Month, since January, 1929, and the Corresponding Values of Net Operating Income



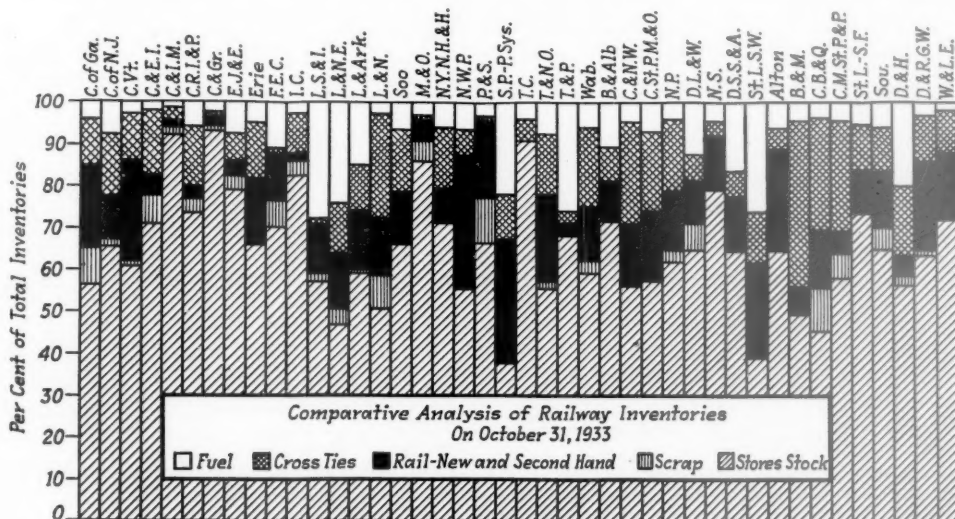
in previous years, while an increase of approximately \$30,000,000 appears to have occurred in the purchases of store-house materials. While the 1933 expenditures for rail given above appear inconsistent, in view of the prominence given to recent plans of the railroads to buy a million tons and the orders for 180,000 tons actually placed since October, it is to be remembered that purchases, as understood in this review, refer only to materials delivered during the period in question, and several months often elapse before rails ordered become "purchases." As to the rails ordered since October, the reduction effected in the price is also to be considered.

#### Upturn Since July

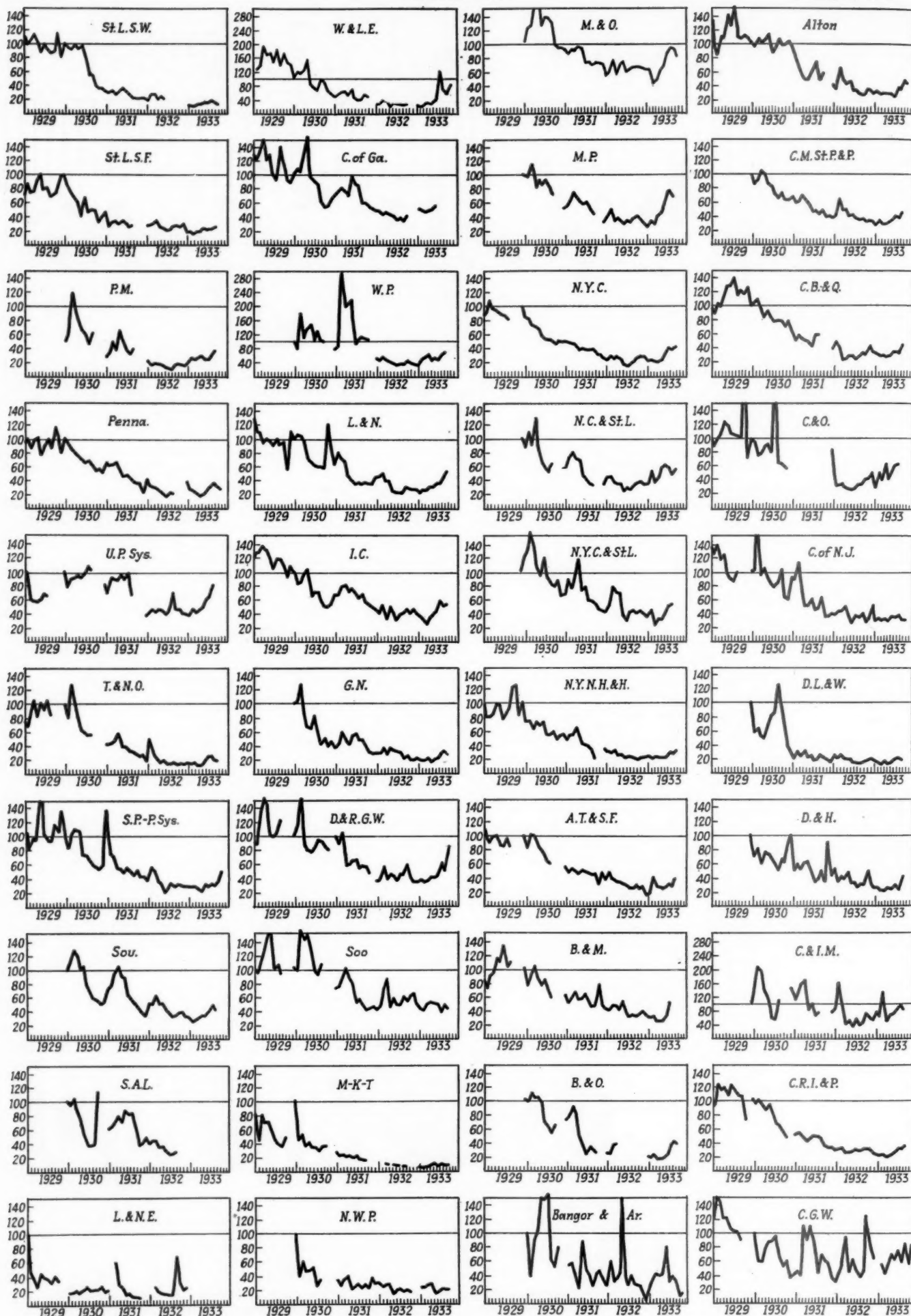
Although purchases of all the roads have not followed the same trend, and while the September and October values were, in the aggregate, somewhat smaller than in August, there has been a pronounced upward movement in purchases, particularly since last July. On the majority of roads, October purchases were higher than those made before the banking and political troubles last April. October purchases in the aggregate were not only 50 per cent higher than in April, when purchases were lowest, but were 29 per cent higher than the total last January. Dollar for dollar, miscellaneous purchases appear to have been 63 per cent higher in October than in April and 50 per cent higher than in January, while

purchases, exclusive of fuel, were 70 per cent higher in October than in April and 52 per cent higher than in January. Some roads have more than doubled their monthly purchases since last spring. Month by month, purchases since last July have been larger than their corresponding values in 1932 and were not only about 25 per cent higher last October than in October, 1932, but represented a larger expenditure in that month than any month since March, 1931, with the exception of last August.

Reference to some of the more conspicuous increases will prove interesting in this connection. October purchases, while not at their highest in all cases, were about \$260,000 higher than in January and about \$450,000 above the lowest month, on the C. B. & Q.; about \$375,000 and \$520,000 higher than January and the lowest month, on the C. M. St. P. & P.; about \$330,000 and \$515,000 higher than January and the lowest month, respectively, on the C. R. I. & P.; and about \$250,000 and \$260,000 higher than January and the lowest month on the D. & R. G. W. October purchases were \$200,000 above January and also the low month in the first 10 months on the E. J. & E.; \$180,000 and \$375,000 higher on the Erie; \$230,000 and \$315,000 on the G. N.; \$425,000 and \$680,000 on the I. C. Corresponding gains of approximately \$600,000 and \$685,000, respectively, were reported on the L. & N.; \$190,000 and \$225,000 on the N. Y. N. H. & H.; \$495,000 and \$625,000 on the Southern; \$200,000



How Railway Inventories Were Divided on Various Roads in October—Scrap Included with Other Materials were not Shown Separately



Purchases of Materials and Supplies Month by Month on Various Railroads—January, 1930, Taken as 100 in Each Case—Data Missing Where Gaps Appear in Charts

and \$440,000 on the S. P.; \$220,000 and \$440,000 higher on the C. & N. W.; \$700,000 and \$825,000 on the A. T. & S. Fe.; \$620,000 and \$780,000 on the B. & O.; and \$1,700,000 and \$2,650,000 on the N. Y. C. lines.

Total purchases for the first 10 months of 1933 did not quite measure up to the corresponding totals for the same 10 months of 1932 on many roads for which com-

the reported value was \$319,200,000, divided approximately into \$20,200,000 for fuel, \$67,400,000 of ties, \$48,200,000 of new and relay rail, and \$186,400,000 of

#### Fuel and Materials and Supplies Purchased

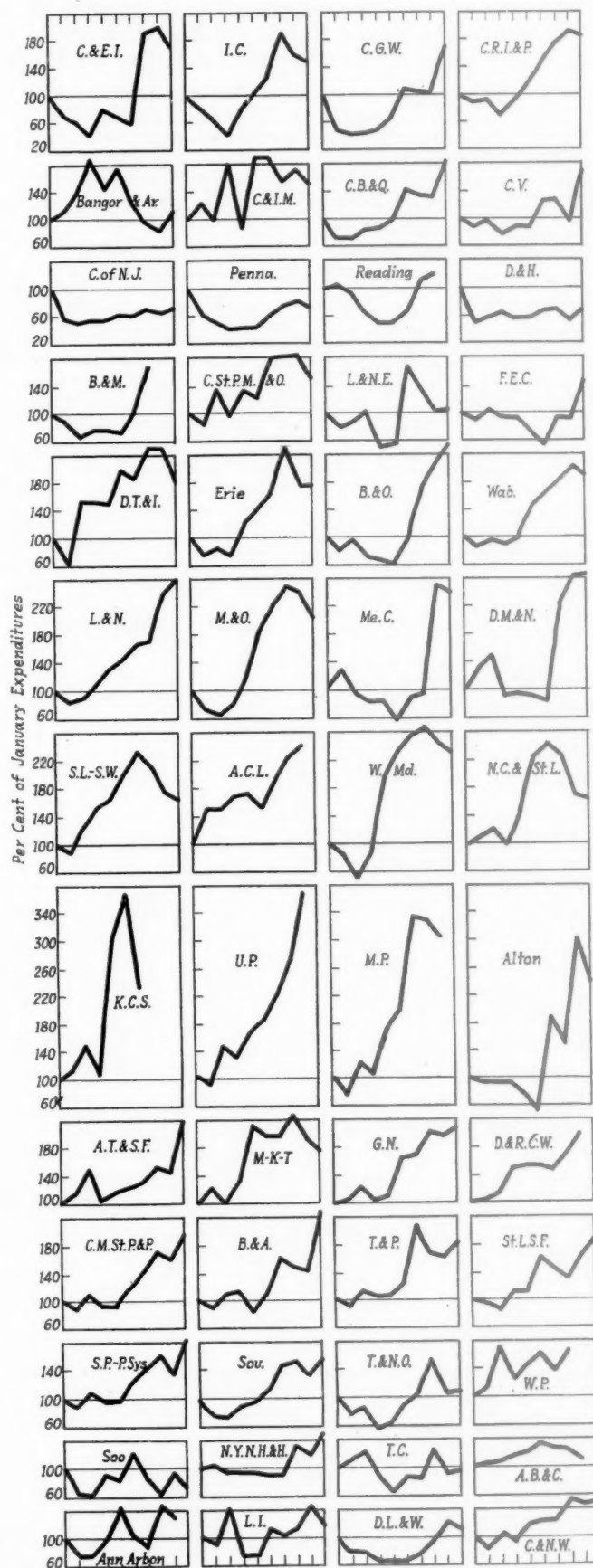
Road	1932 10 Months	1933 10 Months
Alton	\$1,921,135	\$1,605,601
A. T. & S. F. Lines	16,192,763	14,616,585
Bangor & Aroostook	1,019,327	1,834,028
Baltimore & Ohio	8,967,617	9,303,569
Boston & Albany	3,050,607	2,920,164
Boston & Maine	6,071,917	5,051,649
Central of Georgia	1,268,752	1,834,028
Central of New Jersey	3,614,654	3,223,832
Central Vermont	934,138	971,323
Chesapeake & Ohio	6,640,337	8,059,219*
Chicago & Eastern Illinois	1,369,215	1,413,399
Chicago & Illinois Midland	250,109	340,330
Chicago & North Western	9,795,332	9,881,890
Chicago, Burlington & Quincy	8,818,743	8,974,310
Chicago Great Western	2,518,144	2,492,427
Chi., Ind. & Louisville		875,255
Chi., Mil., St. P. & P.	12,742,668	10,172,649
Chicago, K. I. & P. Lines	7,951,404	7,517,041
Chicago, St. P., Minn. & O.	2,488,585	2,372,383
Columbus & Greenville	129,785	123,537
Clinchfield	493,130	497,152
Chicago & Western Indiana	433,747	427,399
Delaware & Hudson	4,349,599	3,590,861
Del., Lack. & Western	5,714,569	5,332,293
Denver & Rio Grande Western	2,316,566	2,351,847
Detroit, Toledo & Ironton	305,338	332,602
Duluth, S. Shore & Atlantic		223,938
Elgin, Joliet & Eastern	665,287	1,258,993
Erie	10,510,920	9,007,066
Florida East Coast	747,022	914,061
Great Northern	8,513,199	6,786,193
Georgia & Florida		223,926
Gulf, Mobile & Northern		482,791
Illinois Central	11,632,817	11,875,669
Illinois Terminal		463,108
Kansas City Southern	1,168,131	1,050,478
Lake Superior & Ishpeming	27,907	139,190
Lehigh & New England	319,042*	424,817
Long Island		800,792
Louisiana & Arkansas	343,825	395,149
Louisville & Nashville	7,376,919	7,355,182
Minn., St. P. & S. S. Marie	3,543,149	3,003,433
Maine Central		1,381,437
Missouri-Kansas-Texas	2,256,255	2,373,883
Missouri Pacific	8,912,002	11,990,507*
Mobile & Ohio	1,006,109	1,117,209
Montour	194,492	223,868
Nashville, Chat. & St. Louis	1,607,667	2,240,786
New York Central System	31,020,187	37,937,263
New York, Chicago & St. L.	4,103,530	3,289,977*
New York, New Haven & H.	5,291,401	4,867,842
Norfolk Pacific	7,306,353	6,359,684
Norfolk Southern		602,829
New York, Ont. & Western		1,497,072
Northwestern Pacific	325,414	255,052
Pennsylvania	33,450,150*	34,109,803
Pere Marquette	1,994,471	3,197,781*
Pittsburg & Shawmut		98,523
Pittsburg, Shawmut & North	135,144	115,915
Reading System	5,905,344	4,800,598
Richmond, Fred. & Potomac		964,674
Rutland	613,250	
St. Louis-San Francisco	4,673,228	7,009,754
St. Louis Southwestern	1,091,708*	831,037
Southern	11,219,887	9,076,863
Southern Pacific-Pac. Sys.	11,086,703	9,031,881
Spokane, Portland & Seattle	607,490	598,317
Tennessee Central	200,386	276,909
Temiskaming & Northern Ontario	3,054,755	2,618,936
Texas & Pacific	2,068,934	2,060,302
Union Pacific	15,595,114	17,570,361*
Wabash	4,289,336	3,897,973
Western Maryland		1,708,933
Western Pacific	1,498,946	1,607,640*
Wheeling & Lake Erie	620,099	1,185,117
Burlington-Rock Island		66,592

\* October estimated.

parative figures are available. Several roads, however, showed gains in excess of a million dollars. That on the New York Central lines was approximately \$7,000,000.

#### Fewer Supplies in Stock

The book value of supplies in the hands of the railroads on October 31, 1932, was \$334,000,000, divided approximately into \$18,200,000 of steam fuel, \$73,000,000 of ties, \$44,000,000 new and relay rails, and \$199,200,000 of other materials, including scrap. On January 1, 1933,



Purchases, Exclusive of Fuel, Ties and Rails, January, 1933, to October, Incl—January Expenditures Taken as 100

other materials, including about \$12,400,000 of scrap.

By contrast, it is estimated, on the basis of the best information available at this time, that total inventories on October 31, 1933, amounted to \$295,000,000, comprising approximately \$20,500,000 of fuel, \$50,000,000 of ties, \$34,000,000 of new and second-hand rails, and about \$191,000,000 of other materials, including about \$8,-

#### Divisions of Materials on Hand—Estimated

	Fuel	Ties	Rails*	Other Material	Total
1932					
October ...	\$18,200,000	\$73,000,000	\$44,000,000	\$199,200,000	\$334,000,000
1933					
January ...	20,200,000	67,400,000	48,000,000	183,400,000	319,200,000
October ...	20,500,000	50,000,000	34,000,000	191,000,000	295,500,000

\* Includes second-hand rails.

500,000 of unsold scrap. This indicates a reduction in total stocks of approximately \$50,000,000 since October, 1932, and about \$25,000,000 since the first of last year; a reduction in tie stocks of about \$20,000,000 since October, 1932, and \$15,000,000 since January, 1933; a

#### Total Materials and Supplies on Hand on Representative Roads

	October 31, 1933	January 1, 1933
Bangor & Aroostook.....	\$802,783	\$886,757
Boston & Maine.....	4,896,984	5,346,308
Central of Georgia.....	904,483	887,967
Central of New Jersey.....	1,826,848	1,966,542
Central Vermont.....	461,577	550,905
Chicago & Eastern Illinois.....	557,039	727,456
Chicago & Illinois Midland.....	230,450	228,836
Chicago, Burlington & Quincy.....	7,781,596	8,944,263
Chicago, Mil., St. P. & P.....	8,393,686	9,486,298
Chicago, R. I. & P.....	5,481,783	6,196,178
Columbus & Greenville.....	112,408	502,283
Denver & Rio Grande Western.....	2,032,104	2,584,302
Duluth, Missabe & Northern.....	1,124,102	1,281,600
Elgin, Joliet & Eastern.....	1,091,971	1,161,003
Erie.....	3,285,014	3,475,570
Florida East Coast.....	1,638,918	1,552,531
Illinois Central.....	7,298,203	7,707,902
Lake Superior & Ishpeming.....	234,306	197,862
Lehigh & New England.....	350,674	341,770
Louisiana & Arkansas.....	448,745	560,197
Louisville & Nashville.....	8,895,816	9,342,132
Minn., St. P. & S. S. Marie.....	1,921,682	2,741,510
Mobile & Ohio.....	667,626	568,802
New York, New Haven & H.....	5,547,882	6,329,585
Northwestern Pacific.....	445,578	501,528
Pittsburg & Shawmut.....	106,821	83,474
Pittsburgh, Shawmut & North.....	100,082	126,446
St. Louis-San Fran. Lines.....	3,425,403	3,067,408
Southern System.....	5,232,445	5,584,026
Southern Pacific-Pacific Sys.....	13,525,881	14,138,865
Tennessee Central.....	198,366	195,963
Southern Pacific-Tex. & La. Lines.....	4,181,791	4,572,846
Texas & Pacific.....	2,732,256	3,053,468
Union Pacific System.....	13,571,544	13,734,688
Wabash.....	1,906,537	3,043,220
Western Pacific.....	1,791,224	1,900,012
Wheeling & Lake Erie.....	620,975	655,654

reduction of \$10,000,000 in rail stocks since October, 1932, and \$15,000,000 since January, 1933. Stock of miscellaneous material in the aggregate reflects a slight reduction from the previous October and an increase in book value since January. The number of roads reporting increases since last January and the number reporting reductions are divided about equally.

**CROSSING ACCIDENTS LESS NUMEROUS.**—The American Railway Association reports that for the first nine months of 1933, accidents at highway grade crossings totalled 2145, an increase of 250, compared with the first nine months of 1932. Total fatalities, 1032, a reduction of 35. Total persons injured, 2,377, a reduction of 319.

**STEADY PROGRESS** is being made in the electrification of German railways, according to recent reports received by the United States Department of Commerce. At the end of 1932 the electrified lines totaled 1,636 kilometers of which 1,343 were main line through routes and the remainder suburban and branch lines. Government loans to Bavaria and Wurttemberg, the report continues, will permit further electrification in those areas.

## Odds and Ends...

### Oldest Railroad Man Dies

Kirby Jackson, of Chicago, said to have been the world's oldest railroad man, died at Ft. Wayne, Ind., on Christmas Eve. He would have been 102 years old on next March 8. Mr. Jackson was born on March 8, 1832, at the time when Andrew Jackson was completing his first term as the sixth President of the United States. As a boy, Mr. Jackson saw the beginnings of the railroad which later was to become the Pennsylvania's main line between Chicago and New York. He started his long railroad career at the age of 26, when President Buchanan was in the White House, and his first job was firing a wood-burning locomotive. That was in 1858. Three years later, he became an engineman, and he continued to pull trains out of Chicago over the Ft. Wayne division of the Pennsylvania until April 1, 1902, when he was retired at the age of 70 years.

### Switching Puzzle

In the Canadian National Railways Magazine and in the Norfolk & Western Magazine, this department came across a new "brain teaser" in the form of a switching puzzle which it is pleased to pass along. The puzzle is attributed to S. S. Lloyd, formerly a Canadian National conductor at Vancouver, B. C., who said that it is based upon an actual problem which confronted him once in Alberta. "On one occasion," says Mr. Lloyd, "while journeying between Lethbridge and Fort McLeod on a Canadian Pacific freight train, we were held at a telegraph station by the dispatcher at Calgary, who inquired if we could meet a down extra at St. Mary's pit spur. My train consisted of 30 cars, while the approaching train consisted of 35 cars and a caboose. The pit spur could hold but 9 cars and an engine, and had but one connection to the main line." Mr. Lloyd's answer to the inquiry was that, yes, the meet could be carried out. How this was done is the problem.

To this department, which had several months of switching experience some years ago, the problem looks quite elementary, but maybe we are wrong. Anyone caring to submit an answer to us is cordially invited to do so.

### Information Wanted

FRANKLIN, PA.

#### TO THE EDITOR:

While looking through some old papers, I discovered a card ticket—at least, I suppose it is that—evidently for passage on a funeral train over the New York Central. My curiosity has been aroused, and I am directing this inquiry to you as I have tried without success to determine, through various New York Central representatives with whom I come in contact, the import of the issuance of such a ticket. It is possible that I am confessing ignorance concerning Dean Richmond, but the only construction that I can place on the matter is that he must have been an executive of the railroad or a public official and that the ticket was issued for passage on his funeral train. But why the notarial seal and why a special ticket? Possibly, through your "Odds & Ends" page, some reader of your publication can enlighten me.

D. T. PECKENS

Assistant Auditor, Lake Erie, Franklin & Clarion.

The ticket to which Mr. Peckens refers, bordered in black, reads:

Funeral of the Late  
Dean Richmond

New York Central Railroad  
BUFFALO TO BATAVIA AND RETURN

J. Tillinghast

Assistant Superintendent

Thursday, August 30th, 1866

On the reverse side of the ticket is the notarial seal of William Thurstone of Buffalo, Erie Co., N. Y. We share Mr. Peckens' curiosity concerning this ticket and shall be glad to hear from any of our readers who are familiar with the circumstances of its issuance.

# NEWS

## Net for Eleven Months Totals \$435,804,479

Figure compares with \$294,012,783 for the corresponding period of previous year

Class I railroads for the first eleven months of 1933 had a net railway operating income of \$435,804,479, which was at the annual rate of return of 1.76 per cent on their property investment, according to reports compiled by the Bureau of Railway Economics. In the first eleven months of 1932, their net railway operating income was \$294,012,783, or 1.19 per cent. Operating revenues for the first eleven months of 1933 totaled \$2,850,116,642, compared with \$2,883,542,516 for the same period in 1932, a decrease of 1.2 per cent. Operating expenses amounted to \$2,062,237,383, compared with \$2,217,503,913 for the same period in 1932, a decrease of 7 per cent.

Class I railroads in the eleven months paid \$239,105,900 in taxes compared with \$259,606,210 for the same period in 1932, a decrease of 7.9 per cent. For the month of November alone, the tax bill amounted

426,026 or 1.75 per cent. Operating revenues in the Eastern district for eleven months totaled \$1,457,829,200, a decrease of eight-tenths of one per cent below the corresponding period in 1932, while operating expenses totaled \$1,020,873,422, a decrease of 6.2 per cent. Railroads in the Eastern district for November had a net of \$21,024,015, compared with \$19,912,485 in November, 1932.

Class I railroads in the Southern district for eleven months had a net of \$53,062,459, at the rate of 1.76 per cent. For the same period in 1932, their net was \$19,925,230, at the rate of 0.66 per cent. Operating revenues in the Southern district for eleven months amounted to \$356,510,913, an increase of 2.8 per cent over the same period in 1932, while operating expenses totaled \$267,671,053, a decrease of 7.4 per cent. Class I railroads in the Southern district for November had a net of \$4,131,320, compared with \$3,194,433 in November, 1932.

Class I railroads in the Western district for eleven months had a net of \$121,766,899, at the rate of 1.19 per cent. For the same eleven months of 1932, they had a net of \$76,661,527, at the rate of 0.74 per cent. Operating revenues for eleven

## Roads Showed Improvement in 1933, Says R. H. Aishton

Chairman of board of American Railway Association authorizes new year's statement

R. H. Aishton, chairman of the board of directors of the American Railway Association, has authorized the following new year statement:

"The railroads of this country in 1933 showed an improvement, compared with the preceding year, in the financial results from operation. This has been due to a number of reasons. One was the increase that took place in the amount of freight traffic handled by the rail carriers in the past twelve months, compared with the same period in 1932; while the other was the fact that, although the volume of traffic was greater, the railroads were able to reduce their operating cost during the year.

"The volume of freight traffic, on the basis of revenue ton miles, moved by the Class I railroads in 1933 increased approximately eight per cent over 1932. At the same time, gross operating revenues in the past twelve months were approximately one per cent below those for the preceding year. As a result, the net railway operating income of the Class I railroads in 1933 was approximately sixteen per cent greater than it was in 1932.

"Preliminary reports for the year show that the Class I railroads as a whole had a net railway operating income in 1933 of \$465,000,000 equivalent to a return of 1.77 per cent on their property investment. Class I railroads in 1932 had a net railway operating income of \$326,298,000, or a return of 1.25 per cent on their property investment. Gross operating revenues in 1933 amounted to approximately \$3,090,000,000 a decrease of 1.2 per cent under those for 1932, while operating expenses amounted to \$2,250,000,000, a decrease of 6.4 per cent under the previous year.

"The estimate as to earnings for the twelve months of 1933 was based on complete reports for the first ten months and an estimate by the Bureau of Railway Economics as to earnings in November and December. The net railway operating income for the ten months period totaled \$398,239,000 compared with \$260,616,000 for the corresponding period in 1932.

"Measured in revenue ton miles, the volume of freight handled in 1933 was approximately 252,000,000,000 revenue ton miles, which was an increase of nearly eight per cent compared with the volume of freight traffic in 1932. This estimate was based on reports of actual freight move-

CLASS I RAILROADS—UNITED STATES  
Month of November

	1933	1932	Per Cent Increase or Decrease
Total operating revenues.....	\$257,675,680	\$250,743,762	2.8 In.
Total operating expenses.....	191,824,483	187,695,868	2.2 In.
Taxes.....	17,581,303	19,390,108	9.3 De.
Net railway operating income.....	37,565,822	33,396,305	12.5 In.
Operating ratio—per cent.....	74.44	74.86	.....
Rate of return on property investment—per cent.....	1.74	1.54	.....
Ten Months Ended November 30			
Total operating revenues.....	\$2,850,116,642	\$2,883,542,516	1.2 De.
Total operating expenses.....	2,062,237,383	2,217,503,913	7.0 De.
Taxes.....	239,105,900	259,606,210	7.9 De.
Net railway operating income.....	435,804,479	294,012,783	48.2 In.
Operating ratio—per cent.....	72.36	76.90	.....
Rate of return on property investment—per cent.....	1.76	1.19	.....

to \$17,581,303, a decrease of \$1,808,805 under November, 1932.

Thirty-five Class I railroads failed to earn expenses and taxes in the eleven months, of which 7 were in the Eastern district, 10 in the Southern, and 18 in the Western.

Class I railroads for November had a net of \$37,565,822, at the rate of 1.74 per cent. In November last year, their net was \$33,396,305, or 1.54 per cent. Operating revenues for November amounted to \$257,675,680, compared with \$250,743,762 in November, 1932, an increase of 2.8 per cent. Operating expenses totaled \$191,824,483, compared with \$187,695,868 in the same month in 1932, an increase of 2.2 per cent.

Class I railroads in the Eastern district for eleven months had a net of \$260,975,121, at the rate of 2.28 per cent. For the same period in 1932, their net was \$197,-

months amounted to \$1,035,776,529, a decrease of 2.9 per cent, while operating expenses totaled \$773,692,908, a decrease of 7.9 per cent. For November alone, the railroads in the Western district reported a net of \$12,410,487. The same roads in November, 1932, had a net of \$10,289,387.

## Rate Revision Proposed on Products of Cotton and Other Fabrics

Examiner Henry B. Armes of the Interstate Commerce Commission has submitted a proposed report of 189 pages on an investigation of rates on cotton, woolen, and knitting factory products throughout the country, recommending a re-alignment of many of the rates on the basis of various percentages of the first-class rates. A lower basis of rates is proposed for unfinished cotton piece goods than upon finished goods.

ments for the first ten months in 1933 and an estimate for the last two months.

"Loading of revenue freight in 1933, based on actual loading for the first 50 weeks and an estimate for the last two weeks, totaled 28,880,000 cars, an increase of 700,000 cars or 2.5 per cent compared with 1932, but a reduction of 8,271,000 cars or 22.3 per cent compared with 1931.

"Passenger traffic in 1933 amounted to 16,400,000 passenger miles. This was a reduction of about three per cent under 1932, and was the smallest annual percentage of reduction that has been reported in four years."

### Co-ordinator Eastman Meets with Co-ordinating Committees

Joseph B. Eastman, federal co-ordinator of transportation, held a general conference at Washington on January 4 with the members of the three Regional Co-ordinating Committees.

### \$5,305,970 Recommended for I. C. C.

Appropriations amounting to \$5,305,970 for the Interstate Commerce Commission for the fiscal year 1935 are proposed in the Budget as transmitted to Congress this week by the President. This compares with \$5,190,000 appropriated for the year ending June 30, 1934.

### Vacancy on I. C. C.

The term of Ezra Brainerd, Jr., as a member of the Interstate Commerce Commission expired on December 31 without any appointment having been made by President Roosevelt, which left a vacancy on the commission at the beginning of the new year. It has been expected that the President would appoint a Democrat to the position, and Mr. Brainerd is a Republican.

### California Rainfall Interrupts Service

A 4½-in. rainfall in the vicinity of Los Angeles, Cal., Saugus, Glendale and Pasadena, interrupted service on the Southern Pacific and the Atchison, Topeka & Santa Fe for several hours on January 1. On the Southern Pacific, washouts occurred between Saugus and Burbank, interrupting service over both the Coast and Valley lines. Damage to the Coast line was repaired and the line was placed in operation at noon on January 2. During the interruption of service, railway passengers were carried through the flooded area by motor coaches. On the Atchison, Topeka & Santa Fe, several washouts occurred between Los Angeles and Fullerton.

### Eastman Gives Results of Special Inspection of Stored Equipment

Co-ordinator Eastman on January 4 announced the results of the special inspection of cars and locomotives, reported stored in serviceable condition October 1, made at his request by I. C. C. bureaus, saying that facts developed lead to the conclusion that neither fears of a freight car shortage nor the optimism of those who relied upon railroad reports of surplus equipment were fully justified. Of freight cars inspected 55.5 per cent were found fit for the service for which they were de-

signed, 4.4 per cent unfit for any service until repaired and 40.1 per cent were suitable for the transportation of certain commodities only. Of locomotives inspected 21.3 per cent were in need of repairs requiring three days or more.

### Report of Railroad Credit Corporation

The Railroad Credit Corporation has been able to make return distributions to participating carriers of \$7,425,992, equal to 10 per cent of the fund created by the agreement to pool the proceeds to March 31, 1933, of the rate increases allowed by the Interstate Commerce Commission in Ex Parte No. 103, according to the financial statement of the Corporation as of December 31, which was filed with the Interstate Commerce Commission. The distributions have been made in four installments, the fourth and latest having been made on December 30, at which time \$2,220,606, or 3 per cent, was repaid. The 1933 contributions to the pool totaled \$23,187,720, representing the emergency revenues earned between November 1, 1932 and March 31, 1933, while loans aggregated \$25,549,349. As the lending period terminated May 31, 1933, the corporation has since that date been liquidating its affairs, to the end that it may return to participants their respective contributions.

### Burlington High-Speed Train to be Ready in March

The three-car articulated, high-speed train being built by the E. G. Budd Manufacturing Company for the Chicago, Burlington & Quincy will be delivered to the railroad in Chicago during March, after a three weeks' tour of the East. While the itinerary of the train has not been definitely decided upon, approximately 24 eastern points and 80 western points will be visited before the train is placed in regular service. When the train leaves the Philadelphia works of the manufacturer in the latter part of February, it will be exhibited at the Broad Street station of the Pennsylvania in that city, after which it will be on display for two days at New York. It will then visit the remaining eastern cities, among which are Washington, D. C., and Cleveland, Ohio. Late in March, the train will be on exhibition at Chicago for several days, after which it will tour the Burlington system before being placed in regular service.

### Southern Pacific Labor Controversy

The emergency board appointed by President Roosevelt on November 23 to investigate a dispute between the Southern Pacific lines in Texas and Louisiana and the four brotherhoods on a list of 108 grievances, because of which the employees had voted to strike unless a satisfactory settlement could be obtained, has submitted a report, made public at the White House on December 28, to the effect that after a hearing an agreement was reached on several of the points and methods of adjusting others had been agreed upon. It was agreed that the parties would continue direct negotiation and settle as many of the disputes as possible and that others would be submitted to arbitration, while some would be submitted to the South-

western Regional Train Service Board of Adjustment. Three cases were heard by the emergency board and the board in its report makes recommendations as to these, expressing the conclusion that "all substantial causes for the threatened strike have been removed."

### Derailement at Baltimore, July 25

The Interstate Commerce Commission, in a report dated November 29, gives details of the derailment of a northbound freight train on the Pennsylvania, at Baltimore, July 25, resulting in the injury of 4 employees and 2 other persons, which was due primarily to a false clear indication at an electro-pneumatic interlocking signal. The signalman and the leverman in the cabin are censured for not trying to stop the train, after an automatic warning device had given them notice that some part of the interlocking was not working properly. The route of the train was from a freight track through a crossover into the northbound main, at the entrance of Union Tunnel, but the crossover switch turned it on to a spur track, though the signal had indicated a clear route to the main track. The lever controlling the switch, when operated from normal to reverse, did not move the switch rails, due to the fact that the electric latch slipped over the locking tooth on the reverse-indication segment of the machine; this permitted the lever to be moved to full reverse position, without requiring a momentary stop at an intermediate position, to permit the switch movement to function.

The failure of the switch to move caused warning lights to be displayed, and a warning whistle to be sounded; and the signalman then should have stopped the train, if possible, to see what was the matter. But finding nothing apparently wrong in the tower, the signalman and the leverman agreed in permitting the train to proceed.

At Union Junction, the tower involved in this case, 16 levers were provided with the alarm circuit, but 20 others were not thus fitted. The alarm system, says the report, should be extended to cover all levers in this plant.

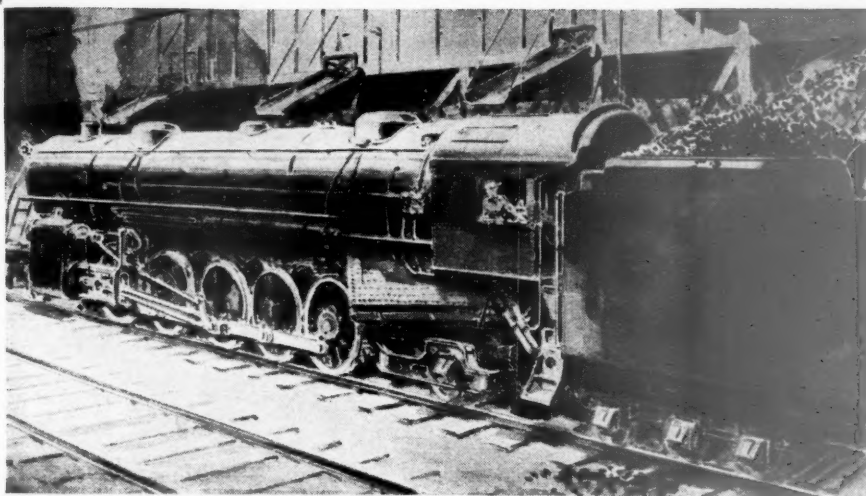
### Holiday Travel Larger Than Last Year

Railway passenger travel during the Christmas and New Year holidays this year showed an increase of from 25 to 30 per cent, as compared with last year, judged by the extra cars required to handle the business. Increased business was particularly noticeable on eastern railroads and New York and Philadelphia terminals have estimated increases of 30 to 40 per cent. In the western territory some railroads experienced movements considerably in excess of those last year, while others reported only slight increases.

The movement of holiday business this year was affected adversely by rates and weather, the conditions last year being more favorable to travel. To what extent the rates affected travel in the West is impossible to determine. Last year, Christmas and New Year occurred on Sunday, enabling travelers to take advantage of the week-end rates of one fare plus 25 cents. This year, with Christmas and New Year



## LOCOMOTIVES *that* *"Eat their heads off"*



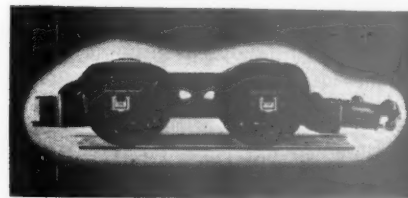
Like a horse in the stable that "eats its head off" while waiting to be used, excess locomotive capacity is uneconomic.

Use The Booster to supply power for peak loads, then design the rest of the locomotive to take care of normal demands.

In this way you will have a

lighter locomotive that is easy on track and low in maintenance.

To supply more power in the main engine only for infrequent use is contrary to economic law.



**FRANKLIN RAILWAY SUPPLY COMPANY, INC.**

NEW YORK

CHICAGO

MONTREAL

on Monday, the excursion rates in effect were higher. Eastern railroads operating between New York and Chicago, on the other hand, reduced their rates below those for the holidays last year and travel increased substantially. The holiday business on the western region of the Pennsylvania required twice as many cars as last year.

One of the most outstanding developments this year is the revival of Florida travel from the eastern seaboard and Chicago, which during the latter days of December exceeded the peak movement of last year. The count at principal hotels in Florida shows an increase of 90 per cent at the end of December, as compared with the count on January 10, 1933.

### The Canadian Roads in November

The Canadian National in November had increased gross and net revenues and a decrease in operating expenses as compared with the same month of last year.

Gross revenues totaled \$13,287,651, an increase of \$248,178 as compared with November last year. Operating expenses were reduced by \$563,321 for the month, leaving net revenue of \$1,548,099 as against \$736,600 in the same month of last year, an increase of \$811,499.

For the eleven months gross revenues totaled \$136,166,245, a decrease of \$13,023,668 as compared with the corresponding period of 1932. Operating expenses declined by \$11,990,570 and net revenue in the eleven months of 1933 amounted to \$4,998,057, a decline of \$1,033,098 from the net for the corresponding eleven months of last year. The summary follows:

NOVEMBER			
	1933	1932	Increase
Gross .....	\$13,287,651	\$13,039,473	\$248,178
Expenses ..	11,739,551	12,302,872	*563,321
Net .....	\$1,548,099	\$736,600	\$811,499

\* Decrease.

ELEVEN MONTHS			
	1933	1932	Decrease
Gross .....	\$136,166,245	\$149,189,913	\$13,023,668
Expenses ..	131,168,187	143,158,757	11,990,570
Net .....	\$4,998,057	\$6,031,155	\$1,033,098

The Canadian Pacific had net revenue in November of \$3,585,809, as compared with \$3,324,291 in November of last year, an increase of \$261,517. The main factor in this rise was continued economies, for the month's gross was lower by \$340,909—\$10,389,923 compared with \$10,730,832 a year ago. Operating expenses of \$6,804,113, compared with \$7,406,540 in the preceding year showed a reduction of \$602,426.

For the eleven months gross revenues were \$104,356,950, a decrease of \$9,878,562. Expenses were reduced, however, by \$9,715,035—\$86,741,243 comparing with \$96,456,278, the result being net of \$17,615,707 for the period, a reduction of only \$163,527 from the \$17,779,235 net reported for the same period in 1933.

### Meetings & Conventions

The following list gives names of secretaries, date of next or regular meetings and places of meetings.

AIR BRAKE ASSOCIATION.—T. L. Burton, Room 2205, 150 Broadway, New York, N. Y.  
ALLIED RAILWAY SUPPLY ASSOCIATION.—F. W. Venton, Crane Company, 836 S. Michigan Ave., Chicago, Ill. To meet with Air Brake Association, Car Department Officers' Asso-

ciation, International Railroad Master Blacksmiths' Association, International Railway Fuel Association, International Railway General Foremen's Association, Master Boiler Makers' Association and the Traveling Engineers' Association.

AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, F. T. R., M. & O. R. R., Chicago, Ill.

AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. L. Duncan, 332 S. Michigan Ave., Chicago, Ill.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—W. C. Hope, C. R. R. of N. J., 143 Liberty St., New York, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—F. O. Whiteman, Union Station, St. Louis, Mo. Annual meeting, June 19-21, 1934, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, Poole Bros., Inc., 85 W. Harrison St., Chicago, Ill. Next meeting, January 19-20, 1934, Commodore Hotel, New York, N. Y.

AMERICAN ASSOCIATION OF SUPERINTENDENTS OF DINING CARS.—F. R. Borger, C. I. & L. Ry., 836 Federal St., Chicago, Ill.

AMERICAN ELECTRIC RAILWAY ASSOCIATION.—(See American Transit Association.)

AMERICAN RAILWAY ASSOCIATION.—H. J. Forster, 30 Vesey St., New York, N. Y.

Division I.—Operating.—J. C. Caviston, 30 Vesey St., New York, N. Y.

Freight Station Section.—R. O. Wells, Freight Agent, Illinois Central Railroad, Chicago, Ill.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.

Protective Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.

Safety Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.

Telephone and Telephone Section.—W. A. Fairbanks, 30 Vesey St., New York, N. Y.

Annual meeting, June 12-14, 1934, Hotel Stevens, Chicago, Ill.

Division II.—Transportation.—G. W. Covert, 59 E. Van Buren St., Chicago, Ill.

Division III.—Traffic.—J. Gottschalk, 143 Liberty St., New York, N. Y.

Division IV.—Engineering.—E. H. Fritch, 59 E. Van Buren St., Chicago, Ill.

Annual meeting, March 13-14, 1934, Palmer House, Chicago, Ill.

Construction and Maintenance Section.—E. H. Fritch, 59 E. Van Buren St., Chicago, Ill.

Annual meeting, March 13-14, 1934, Palmer House, Chicago, Ill.

Electrical Section.—E. H. Fritch, 59 E. Van Buren St., Chicago, Ill.

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York, N. Y.

Annual meeting, March 12-13, 1934, Hotel Stevens, Chicago, Ill.

Division V.—Mechanical.—V. R. Hawthorne, 59 E. Van Buren St., Chicago, Ill.

Equipment Painting Section.—V. R. Hawthorne, 59 E. Van Buren St., Chicago, Ill.

Division VI.—Purchases and Stores.—W. J. Farrell, 30 Vesey St., New York, N. Y.

Division VII.—Freight Claims.—Lewis Pilcher, 59 E. Van Buren St., Chicago, Ill.

Annual meeting, May 22, 1934, New York, N. Y.

Division VIII.—Motor Transport.—George M. Campbell, 30 Vesey St., New York, N. Y.

Car Service Division.—C. A. Buch, 17th and H Sts., N. W., Washington, D. C.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—C. A. Lichty, C. & N. W. Ry., 319 N. Waller Ave., Chicago, Ill.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—J. A. Senter, Ind. Agt., N. C. & St. L. Ry., Nashville, Tenn. Annual meeting, 1934, Kansas City, Mo.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in co-operation with the American Railway Association, Division IV.—E. H. Fritch, 59 E. Van Buren St., Chicago, Ill.

Annual meeting, March 13-14, 1934, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—J. L. James, L. & N. Employees' Magazine, Louisville, Ky.

AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION.—G. G. Macina, C. M., St. P. & P. R. R., 11402 Calumet Ave., Chicago, Ill.

Exhibit by Tool Foremen Suppliers' Association.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—R. E. Schindler, Union Trust Bldg., Washington, D. C.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—Calvin W. Rice, 29 W. 39th St., New York, N. Y.

Railroad Division.—Marion B. Richardson, Ahrens & Richardson, 30 Church St., New York, N. Y.

AMERICAN TRANSIT ASSOCIATION.—Guy C. Hecker, 292 Madison Ave., New York, N. Y.

AMERICAN WOOD PRESERVERS' ASSOCIATION.—H. L. Dawson, 1427 Eye St., N. W., Washing-

ton, D. C. Annual meeting, January 23-25, 1934, Rice Hotel, Houston, Tex.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—H. D. Morris, District Claim Agent, Northern Pacific Ry., St. Paul, Minn. Annual meeting, 1934, Cleveland, Ohio.

ASSOCIATION OF RAILWAY ELECTRICAL ENGINEERS.—Jos. A. Andreucetti, C. & N. W., 1519 Daily News Building, 400 W. Madison St., Chicago, Ill. Exhibit by Railway Electrical Supply Manufacturers' Association.

ASSOCIATION OF RAILWAY EXECUTIVES.—Stanley J. Strong, Transportation Building, Washington, D. C.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—J. W. Shoop, The Lehon Company, Oakley Ave., 44th and 45th Sts., Chicago, Ill. Meets with American Railway Bridge and Building Association.

CANADIAN RAILWAY CLUB.—C. R. Crook, 2276 Wilson Ave., N. D. G., Montreal, Que. Regular meetings, second Monday of each month, except June, July and August, Windsor Hotel, Montreal, Que.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—A. S. Sternberg, M. C. B. Belt Ry. of Chicago, 7926 S. Morgan St., Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—G. K. Oliver, 2514 W. 55th St., Chicago, Ill. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF LOS ANGELES.—J. W. Krause, Room 299, 610 S. Main St., Los Angeles, Cal. Club not active at present time.

CAR FOREMEN'S ASSOCIATION OF ST. LOUIS, Mo.—J. F. Brady, Main and Barton Sts., St. Louis, Mo. Operation suspended indefinitely.

CENTRAL RAILWAY CLUB OF BUFFALO.—M. D. Reed, 1817 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

CINCINNATI RAILWAY CLUB.—D. R. Boyd, 2920 Utopia Place, Hyde Park, Cincinnati, Ohio. Operation suspended indefinitely.

CLEVELAND RAILWAY CLUB.—F. L. Frericks, 14416 Alder Ave., Cleveland, Ohio. Regular meetings, second Monday of each month, except June, July and August, Hotel Cleveland, Cleveland, Ohio.

INTERNATIONAL RAILROAD MASTER BLACKSMITHS' ASSOCIATION.—W. J. Mayer, Michigan Central R. R., Detroit, Mich.

INTERNATIONAL RAILWAY FUEL ASSOCIATION.—T. D. Smith, 1660 Old Colony Building, Chicago, Ill.

INTERNATIONAL RAILWAY GENERAL FOREMEN'S ASSOCIATION.—Wm. Hall, 1061 W. Wabasha St., Winona, Minn.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—James B. Walker, 270 Madison Ave., New York, N. Y.

NATIONAL RAILWAY APPLIANCE ASSOCIATION.—C. W. Kelly, Suite 322, 910 S. Michigan Ave., Chicago, Ill.

NATIONAL SAFETY COUNCIL.—Steam Railroad Section (See Safety Section, American Railway Association).

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Copley-Plaza Hotel, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York, N. Y. Regular meetings, third Friday of each month, except June, July and August, 29 W. 39th St., New York, N. Y.

PACIFIC RAILWAY CLUB.—W. S. Wollner, P. O. Box 3275, San Francisco, Cal. Regular meetings, second Thursday of each month, alternately in San Francisco and Oakland.

RAILWAY ACCOUNTING OFFICERS' ASSOCIATION.—E. R. Woodson, Transportation Building, Washington, D. C. Annual meeting, 1934, White Sulphur Springs, Va.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton (Treas. and Asst. Sec.), First National Bank Building, Chicago, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 1841 Oliver Building, Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRICAL SUPPLY MANUFACTURERS' ASSOCIATION.—Edward Wray, 9 S. Clinton St., Chicago, Ill. Meets with Association of Railway Electrical Engineers.

RAILWAY FIRE PROTECTION ASSOCIATION.—R. R. Hackett, Baltimore & Ohio R. R., Baltimore, Md.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—J. D. Conway, 1841 Oliver Building, Pittsburgh, Pa. Meets with Mechanical Division, Purchases and Stores Division and Motor Transport Division, American Railway Association.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with Telegraph and Telephone Section of A. R. A. Division I.

## Supply Trade

**H. E. Birch**, president of the **Beaumont Birch Co.**, Philadelphia, Pa., has been appointed eastern railway representative of the **Ross and White Co.**, Chicago.

**D. J. Almon**, Paul Brown building, St. Louis, Mo., has been appointed district sales agent for **Morrison Metalweld Process, Inc.**, Buffalo, N. Y. Mr. Almon will represent this company in the Southwest territory.

**B. T. Thompson**, general sales agent of the **Standard Oil Company of Indiana**, with headquarters at Chicago, retired on December 30. He began work on October 2, 1884, as a messenger boy in Kansas City, Mo., for the Consolidated Tank Line Company, one of the organizations through



B. T. Thompson

which Standard Oil then marketed. He was transferred to Chicago in 1896 as an assistant in Standard of Indiana's lubricating department. In the 37 succeeding years he served in various capacities in that department, including those of manager and general manager. Recently he has handled the company's accounts with large corporations.

### Crosstie Production Under NRA Lumber Code

The Railway Tie Association, acting in behalf of the producers of railway crossties, has accepted a proposal that the railroad tie industry become a self-governing division under the lumber code, thereby bringing to a conclusion a controversy between the producers of crossties, who desired a code independent of the lumber industry, and the lumber producers, who sought to include crossties with other forest products. Under the arrangement proposed, the Railway Tie Association will be the administrative agency for this division of the lumber and timber products code.

### Railroad Special Track Equipment Code Hearing

A number of fundamental changes will have to be made in the code proposed by manufacturers of railroad special track equipment before it will be acceptable to the N. R. A., proponents of the code were told at a hearing on December 29. As-

sistant Deputy Administrator F. H. Kuhn took the lead in pointing out provisions and omissions which he said appeared to be out of harmony with the N. R. A. program, and with the record developed at the public hearing as a basis he asked that the code committee meet with representatives of the N. R. A. advisory boards in an effort to arrive at a code that will be satisfactory.

The industry's code was presented by George Link, Jr., counsel for the Manganeese Track Society, and chairman of its code committee, who said the industry was in complete agreement on the proposed terms. He said the industry had recently felt some improvement, but had been "hit harder than any other industry in the country" and the code provisions on hours and wages represented the utmost the industry could do at this time for labor. The code calls for an average 40-hour work week, with 48 hours at peak periods and fixes minimum wages for ordinary labor ranging from 40 cents an hour in the north-central region to 30 cents an hour in the Birmingham area. Figures introduced into the record showed that aggregate sales of the industry fell from \$18,000,000 in 1928, to \$3,400,000 in 1932.

Assistant Deputy Kuhn questioned Mr. Link as to the reason the labor provisions were prefaced with the phrase "so long as the code shall be in effect," and Link replied that there was "no particular reason" for it but "some members of the industry" wanted it. H. L. Brunson, the N. R. A. labor adviser, declared that his board had "decided objection" to the phrase, as it seemed to infer that the labor sections were not on the same legal footing with other parts of the code. Mr. Kuhn said that "unless some very convincing reason" was given for the clause it would have to be stricken out, but said the matter would be considered in the conferences.

Mr. Kuhn asked if the industry would be willing to set a maximum work week for all employees save supervisors and members of their staffs receiving at least \$35 per week (the standard provision). Mr. Link replied that a 48-hour week in peak periods was essential, and reiterated that in its present state, with operations running from 10 to 15 per cent of normal, the industry was making in the code as presented all the concessions it could afford to make to its employees. Mr. Kuhn also asked about the omission of any provision for overtime, and Mr. Link said that some of the companies paid overtime, while others did not, and that the steel code was taken as a guide for the reason that the industry felt that men working side by side in the two industries must receive the same treatment. Kuhn then asked if the industry would be willing to put a six-day-week provision in the code, and Link replied that it would be willing, provided allowance was made for emergencies.

The Assistant Deputy then commented to the effect the code, as he read it, would permit "practically unlimited hours" because, first, it exempted large classes of employees outright, secondly, because when an "adequate" supply of "qualified" labor was not available in any locality the entire hour limitation could be cast aside, and, thirdly, because it exempted all employees engaged in "emergency" work. He drew

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**RAILWAY TIE ASSOCIATION.**—Roy M. Edmonds, 1252 Syndicate Trust Building, St. Louis, Mo.  
**RAILWAY TREASURY OFFICERS' ASSOCIATION.**—L. W. Cox, 1428 Broad Street Station Building, Philadelphia, Pa.

**ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.**—T. F. Donahoe, Gen. Supvr. Road, Baltimore & Ohio, Pittsburgh Pa. Annual meeting, September 18-20, 1934, Hotel Stevens, Chicago, Ill.

**ST. LOUIS RAILWAY CLUB.**—B. W. Frauenthal, Drawer 24, M. P. O., St. Louis, Mo. Meetings temporarily suspended.

**SIGNAL APPLIANCE ASSOCIATION.**—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with A. R. A. Signal Section.

**SOCIETY OF OFFICERS, EASTERN ASSOCIATIONS OF RAILROAD VETERANS.**—M. W. Jones, Baltimore & Ohio, Mt. Royal Station, Baltimore, Md. Annual meeting, October 6-7, 1934, Buffalo, N. Y.

**SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.**—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

**SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.**—R. G. Parks, A. B. & C. R. R., Atlanta, Ga.

**SUPPLY MEN'S ASSOCIATION.**—E. H. Hancock, Treasurer, Louisville Varnish Co., Louisville, Ky. Meets with A. R. A. Division V, Equipment Painting Section.

**TOOL FOREMEN SUPPLIERS' ASSOCIATION.**—E. E. Caswell, Union Twist Drill Co., 11 S. Clinton St., Chicago, Ill. Meets with American Railway Tool Foremen's Association.

**TORONTO RAILWAY CLUB.**—N. A. Walford, P. O. Box 8, Terminal "A," Toronto, Ont. Regular meetings, first Friday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

**TRACK SUPPLY ASSOCIATION.**—L. C. Ryan, Oxweld Railroad Service Co., Carbon & Carbide Building, Chicago, Ill. Meets with Roadmasters' and Maintenance of Way Association.

**TRAVELING ENGINEERS' ASSOCIATION.**—W. O. Thompson, 1177 E. 98th St., Cleveland, Ohio.

**WESTERN RAILWAY CLUB.**—C. L. Emerson, C. M., St. P. & P., Chicago, Ill. Regular meetings, third Monday of each month, except June, July, August and September, Hotel Sherman, Chicago, Ill.

## Equipment and Supplies

### LOCOMOTIVES

**PENNSYLVANIA.**—Agreement reached with P.W.A. on \$77,000,000 loan, approximately \$32,000,000 of which will be used for the building of 101 electric locomotives and 7,000 freight cars. For details see page 15 of this issue.

### PASSENGER CARS

**THE CHESAPEAKE & OHIO** is inquiring for 11 baggage and mail cars and 15 coaches.

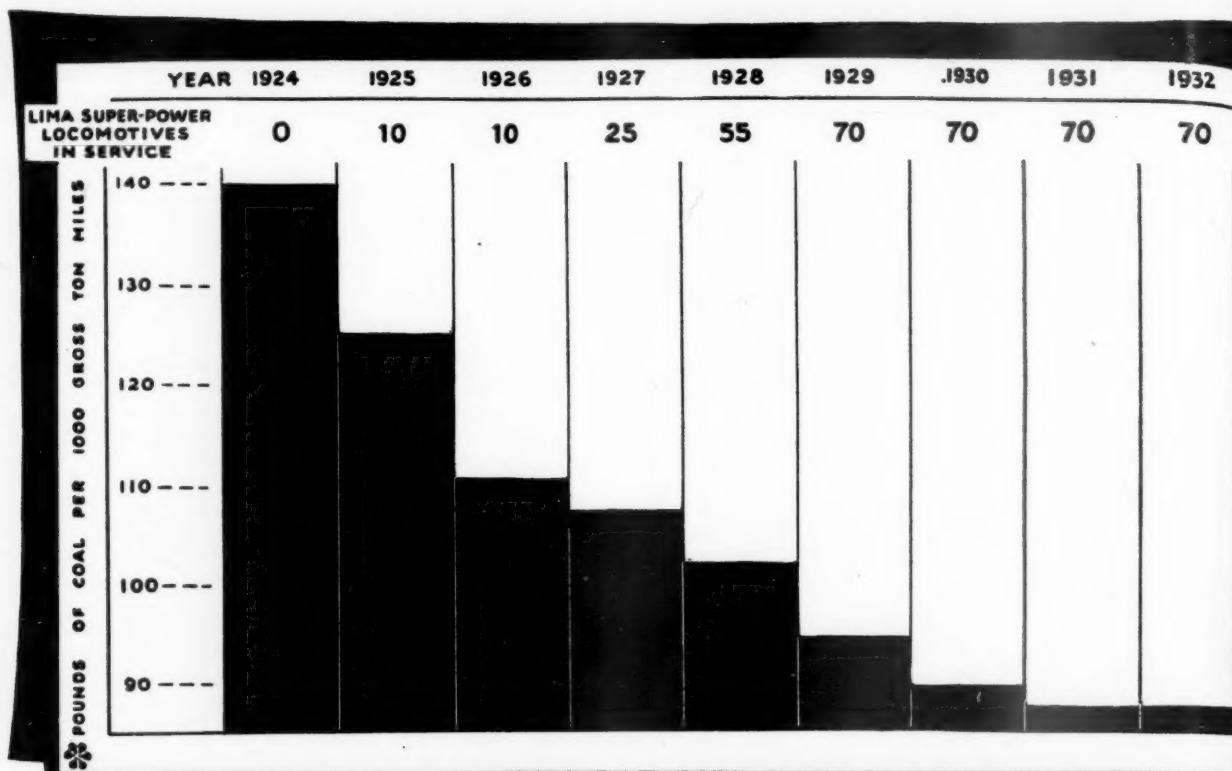
**THE NEW YORK, CHICAGO & ST. LOUIS** is inquiring for one baggage and mail car and 7 coaches.

**THE CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC** is inquiring for 50 coaches and will shortly issue an inquiry for 25 baggage cars.

### IRON AND STEEL

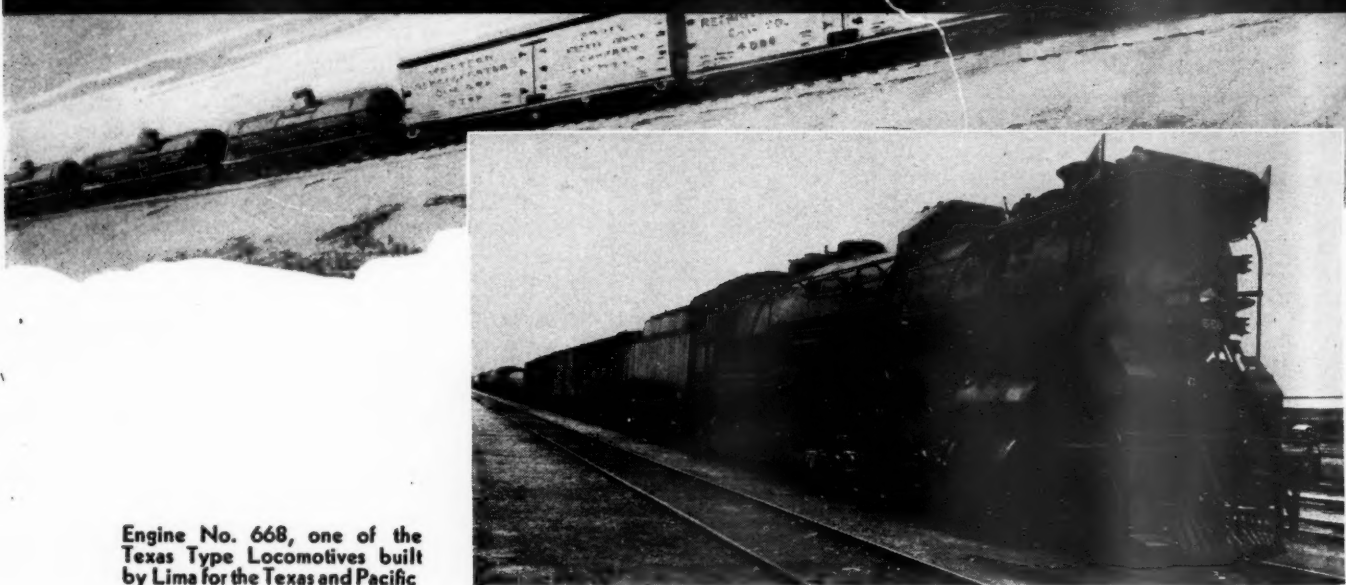
**THE LEHIGH & HUDSON RIVER** has ordered 1,000 tons of rail from the Bethlehem Steel Company.

**THE CHICAGO & NORTH WESTERN** has ordered 350 tons of structural steel for bridges at Allis, Wis., and West Allis, from the Strobel Steel Construction Co.

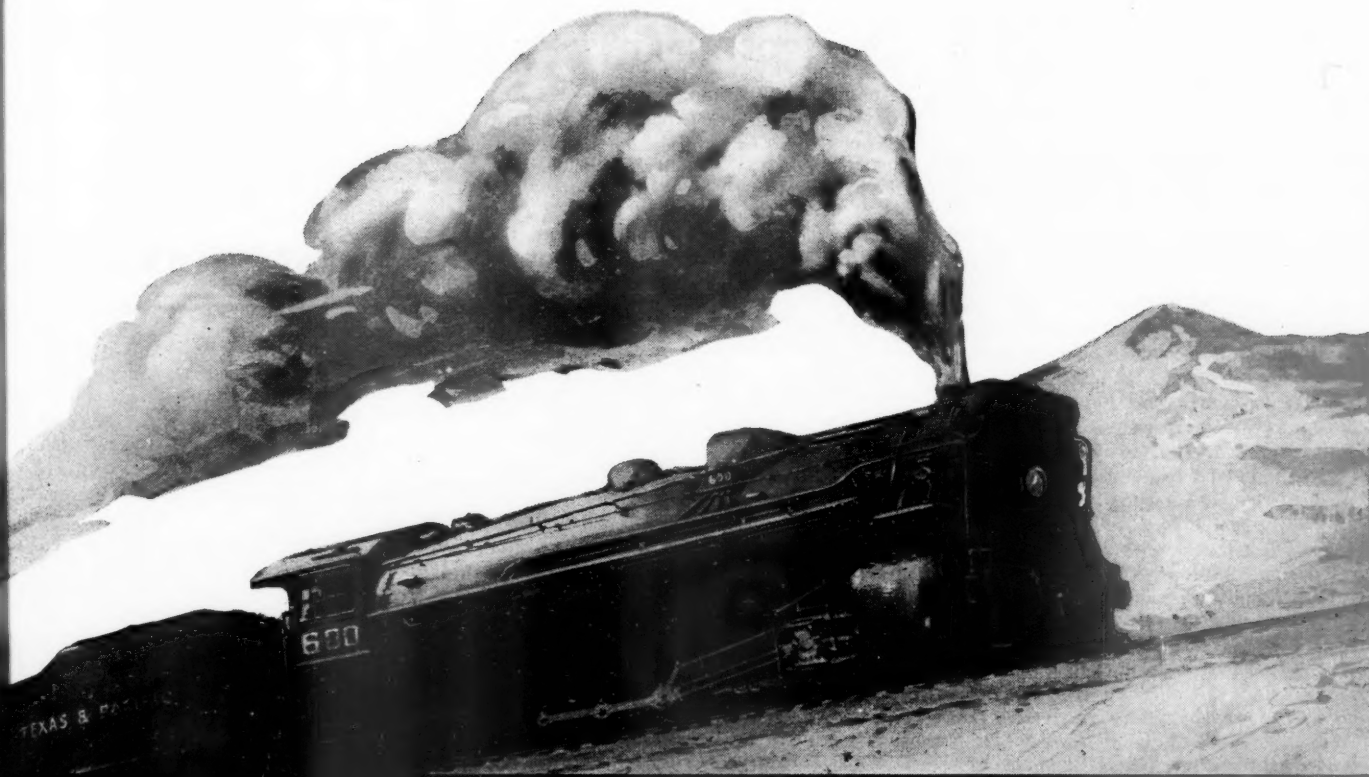


\*Actual oil consumption is equated to coal.

## SUPER-POWER LOCOMOTIVES AID T



Engine No. 668, one of the Texas Type Locomotives built by Lima for the Texas and Pacific



## D TEXAS & PACIFIC FUEL RECORD

It is more than a coincidence that the Texas and Pacific, a road notable for having a high percentage of modern power, is rated among the first roads in the country in individual fuel performance.

● Lima Super-Power locomotives have had an important influence on the Texas and Pacific record. ● Replacing obsolete locomotives with Super-Power is the sure way to better fuel performance and operating economy.

L I M A

**LIMA**  
**LOCOMOTIVE WORKS**  
INCORPORATED

O H I O

from Link the admission that virtually all the work the industry has had lately has been so-called emergency work, as the railroads have not been ordering any equipment they could get along without. Kuhn asked if the industry would agree to pay overtime for all over 8 hours a day and 40 hours per week, and Kuhn said he would poll the industry and find out.

At Kuhn's suggestion, the code committee agreed to limit the number of old and physically handicapped "pensioners" eligible for employment at less than the minimum wage, to 3 per cent of the total number on the payroll, and to give them at least 80 per cent of the minimum pay.

Kuhn told the code committee it would have to delete a section providing that where a manufacturer of special track equipment is subject to a code approved for another industry, he shall have the option as to which code he subscribed to relative to labor provisions. Kuhn said all the N. R. A. advisory boards were strongly opposed to such a provision.

E. L. Fries, the industrial adviser, and T. P. Kelly of the N. R. A. Research and Planning board, contended that under the trade practice sections of the code, as written, it would be possible for a manufacturer to sell at a loss to a parent corporation, and permit the latter to take all the profits. Link said nothing like that was intended—that the purpose was to permit the "courtesy exchange" of materials and products between affiliated companies.

Kuhn asked if Article 4, dealing with trade practices, could not be left out of the code altogether and be handled by the industry in another manner. Link insisted it remain in, asserting the trade practices represented all of value the industry got out of the code. Kuhn then asked if the open price system set up in the code would not lead to price fixing. Link answered in the negative, saying it would merely lay all the cards on the table and eliminate price "chiseling" which had helped demoralize the industry in the past and which, if continued, would prevent the industry from getting back on its feet.

Vigorous objection was expressed by Adviser Kelly of the Research and Planning Division, and Mrs. Alma Ramsey, of the N. R. A. legal division, to a provision making it a violation of the code, subject to federal prosecution, for a member of the industry to fail to charge and collect interest on overdue accounts. They declared this was tantamount to making a collection agency out of the government, and that no such provision had been allowed to stay in any code.

A final provision which Deputy Kuhn found objectionable was one giving the industry the right to cancel the code at any time if the President should make changes it does not approve. Kuhn asked if this was not counter to the mandatory provision appearing earlier to the effect the President may at any time make any change he desires in the code. Link replied that in case the President should modify the code, the industry felt it should have the right to say whether it would accept such modification. "I think," said Kuhn, "that I am correct in saying that no code can go up for approval containing any qualification of the President's powers."

A public hearing has been set for January 8 before Deputy Administrator H. O. King on codes for the railway handbrake and railway car appliances subdivisions of the fabricated metal products industry.

## OBITUARY

**Joseph L. Tillman, Sr.**, vice-president of the Wine Railway Appliance Company, Toledo, Ohio, died on January 1.

**Robert Vincent Devlin**, engineer of the industrial locomotive division of the General Electric Company, died at his home in Erie, Pa., on December 20, at the age of 57 years.

**Frank L. Norton**, vice-president of the Scullin Steel Company, who died on December 21, as reported in the *Railway Age* of December 30, was born at Springfield, Mass., on September 2, 1869. Mr. Norton was educated at Worcester Academy and went to St. Louis, Mo., in 1890. He joined Waters Pierce Oil Com-



Frank L. Norton

pany with headquarters at St. Louis, serving as traveling auditor covering the southwestern territory including Texas. In 1904 he became associated with the Scullin Gallagher Iron & Steel Company, now the Scullin Steel Company of St. Louis, in charge of its New York office, and subsequently was appointed vice-president of the same company, which position he held at the time of his death.

**Thomas Finigan**, first vice-president of The American Brake Shoe & Foundry Company, who died in Chicago on December 25, as announced in the *Railway Age* of December 30, was born at Paterson, N. J., on September 26, 1882. In 1897, he entered the mechanical department of the Consolidated Traction Company at Newark, N. J., (now the Public Service Coordinated Transport) and later became assistant master mechanic. In 1902, he went to the mechanical department of the United Railways at San Francisco, Cal., and in 1906, he was in charge of rehabilitation work following the earthquake. Subsequently, he served as purchasing agent and assistant general manager, which position he held until 1915, when he resigned to become Pacific Coast manager of The American Brake Shoe & Foundry Company, with headquarters at San Fran-

cisco. In 1918, he was elected vice-president with headquarters at Chicago, which position he held until 1929, when he became first vice-president. Since 1920, he had been president of The American Brake Shoe & Foundry Company of California and since 1927, president of the American Brakeblok Corporation, automotive subsidiary of the Brake Shoe Company. He was a director in a large number of industrial companies.

## Construction

**CITY OF ST. LOUIS.**—The City of St. Louis, Mo., has filed a new application with the Public Works Administration for grant of \$247,000 and a loan of \$758,700 to finance the construction of five additional railroad approaches to the St. Louis Municipal bridge across the Mississippi river between St. Louis and East St. Louis, Ill. A former application for a grant of \$219,120 for work estimated at \$876,200 has been withdrawn. When the first application was submitted to the P. W. A. the city had contemplated using a \$700,000 loan from the Reconstruction Finance Corporation but due to some legal technicalities it has been deemed advisable to seek the larger grant and loan.

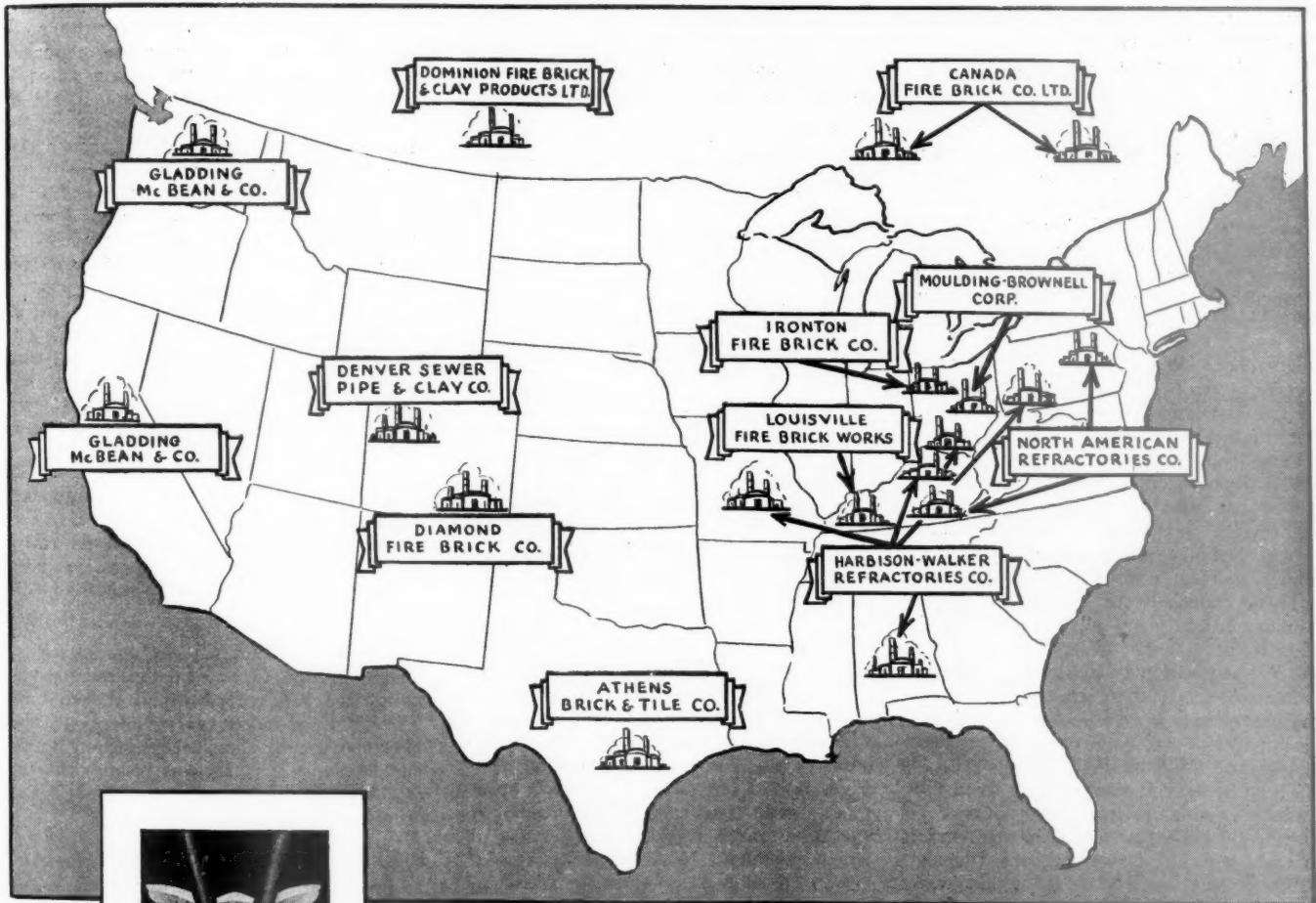
**PENNSYLVANIA.**—A contract has been let to the Brann & Stuart Company, Philadelphia, Pa., for raising and building shelter sheds, platforms and concrete masonry in connection with revision of tracks at the terminal in Camden, N. J. A contract was let to the Ferguson & Edmondson Company, Pittsburgh, Pa., for elevation of tracks and elimination of grade crossings in the village of East Aurora and the town of Aurora, Erie county, N. Y.; this contract has been approved by the New York Public Service Commission, as was reported in the *Railway Age* of December 23.

**PENNSYLVANIA.**—Contracts for the construction of a new passenger station, to be a one-story structure, 32 ft. by 69 ft., in Norristown, Pa., and the paving of almost an acre of adjacent parking space for automobiles were awarded recently by this road to the James McGraw Company, Philadelphia. This improvement is in connection with the Pennsylvania's portion of a grade elimination project ordered by the Pennsylvania Public Service Commission; the entire project contemplates the elimination of seven grade crossings, the elevation of P. R. R. tracks through the borough, a change of line which removed the railroad from the bed of Lafayette street, and the construction of a new passenger and a new freight station. The grade crossing work was practically completed last fall, when DeKalb street, the main cross-town public highway under the railroad was formally opened on September 7. With the elevation and relocation of the railroad, a high island platform 550 ft. long was built between the east and westbound tracks; on this platform a steel shelter and an enclosed waiting-room, 12 ft. by 40 ft., have been erected, and are in service.

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Good Arch Brick is the foundation of a satisfactory locomotive Arch. Realizing this the American Arch Company, after a survey of the brick resources of the country, picked these capable manufacturers from which to supply the railroads.

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## Financial

**ATCHISON, TOPEKA & SANTA FE.—Abandonment.**—The Interstate Commerce Commission has authorized this company and the Oklahoma Central to abandon two segments of the line of the latter company, the first extending from Lehigh, Okla., to a point near Ada Junction, 39.9 miles, and the latter from a point near Byars Junction to Purcell, 21.1 miles; cause, mine abandonment and highway competition.

**BALTIMORE & OHIO.—Acquisition of Coal & Coke.**—The Interstate Commerce Commission has authorized this company to acquire the Coal & Coke Railway, all of the securities of which are pledged under the B. & O.'s refunding and general mortgage.

**CHICAGO, INDIANAPOLIS & LOUISVILLE.—R. F. C. Loan Denied.**—Division 4 of the Interstate Commerce Commission has denied approval of this company's application for a loan of \$500,000 from the Reconstruction Finance Corporation to meet interest payments due January 1 on the ground that the security offered was not sufficient.

**CHICAGO, INDIANAPOLIS & LOUISVILLE.—To Reorganize.**—The Chicago, Indianapolis & Louisville filed a voluntary petition in bankruptcy in the federal district court at Chicago on December 30, under the new federal bankruptcy law which permits continued operation by the existing management while interest is in default, pending reorganization of the capital structure. Inability to meet interest payments totaling \$515,000, which were to become due on January 1, was given as the reason for the Monon's action. The Monon had applied to the Reconstruction Finance Corporation for a loan of \$500,000 to meet these interest payments but approval had been withheld. The petition was approved by Federal Judge James H. Wilkerson.

The Chicago, Indianapolis & Louisville Railway Company was incorporated on March 31, 1897, and was a reorganization of the Louisville, New Albany & Chicago. It has a total of 647 miles of line, with main lines from Chicago via Monon, Ind., to Indianapolis and to Louisville, Ky. Its capital structure consists of \$5,000,000 of authorized preferred stock and \$10,500,000 of authorized common stock and a total funded debt, as of December 31, 1932, of \$27,615,160. Control of the Monon is held jointly by the Louisville & Nashville and the Southern, which companies in July, 1902, jointly acquired 93 per cent of the common stock and 77 per cent of the preferred stock of the company. It is the principal means of access to Chicago for the two controlling roads.

Last year the Monon failed to meet its fixed charges, having a net railway operating deficit of \$111,763. Net losses after payment of interest charges were incurred in 1930 and in 1931 also, the last year in which a net income was earned having been 1929. The Monon is primarily a coal-carrying road. Of the 4,531,652 tons of revenue freight moved in 1932, 1,976,279 tons, or 43.61 per cent, was bituminous

coal. In the past, a substantial proportion of the Monon's coal traffic originated on its own lines, but recently the bulk has been received from connections. Approximately two-thirds of the 1932 coal traffic was received from connecting lines.

**CHICAGO, ROCK ISLAND & PACIFIC.—Bond Interest to be Paid.**—Federal Judge James H. Wilkerson at Chicago, on December 28, authorized the trustees to pay approximately \$2,000,000 in interest on the \$100,000,000 general mortgage bonds of the company. Counsel for the trustees informed the court that there is available cash on hand to pay the interest which fell due July 1, 1933, and if the interest were not paid there will be a general default declared on the bonds, which do not mature until 1998. Such a default would seriously hamper a reorganization of the railroad at this time.

**CINCINNATI-NASHVILLE SOUTHERN.—Abandonment.**—The Interstate Commerce Commission has authorized this company and the Tennessee, Kentucky & Northern, lessee, to abandon as to interstate and foreign commerce of the line of the former company extending from Algood, Tenn., to Livingston, 17 miles, together with operation under trackage rights over 2 miles of the line of the Tennessee Central in Algood.

**DELAWARE, LACKAWANNA & WESTERN.—Abandonment.**—The Interstate Commerce Commission has authorized this company and the Chester R. R. to abandon that portion of the line of the latter company extending from a point 1900 ft. south of the station at Succasunna, N. J., to the southerly terminus of the line at Chester, 6.3 miles.

**DULUTH, SOUTH SHORE & ATLANTIC.—Abandonment.**—Examiner M. S. Jame on of the Interstate Commerce Commission has recommended in a proposed report that the commission permit the abandonment by this company of a portion of the main line, from Marengo, Wis., to Al-louez, near Superior, 73.52 miles, and operation under trackage rights over the Northern Pacific from Superior to Ashland, 63.85 miles, and over the Wisconsin Central from Ashland to Marengo, 12.07 miles; also the construction of a connecting track of 3,375 feet. By the plan submitted the company expects to realize large savings in cost of operation and maintenance by transferring its present train service to the new route. The operating loss on the line had ranged from \$31,350 in 1930 to \$44,502 in 1932. The brotherhoods of train service employees had opposed the abandonment on the ground that certain employees would be thrown out of employment but the report says that, no change being contemplated in train service, the only employees of the South Shore which would be affected are the section forces, varying between 18 and 24 men and 6 station employees, some of whom would be transferred under the seniority rules. It also pointed out that the total number of employees of the South Shore increased from 552 in May to 717 in September. In behalf of the protestants it was urged that the require-

ments of the Emergency Transportation Act, 1933, with respect to maintaining labor forces at the May, 1933, number, be observed and that efforts should be made to spread employment. It was further urged that the abandonment should not be permitted until the recommendation of the federal co-ordinator of transportation respecting consolidations, use of joint facilities, etc., shall be made known or that the entire matter be referred to the co-ordinator. "With regard to the first point," the examiner says, "it may be observed that the provisions of Section 7(b) under Title I of the emergency act apply to actions taken to carry out the purposes of that act and do not extend to authority granted to carriers by this commission under paragraph 1 (18) of the interstate commerce act. With regard to suspending action on these applications for the reason stated, it would seem that no justification could be found for postponing the approval of the plan by the commission on the ground that the findings or recommendations of the federal co-ordinator may have a bearing on this proposal. It would appear impracticable, at this point in the proceedings, to refer the case to the co-ordinator for adjudication, and unnecessary to treat it as part of a comprehensive study of all the rail lines in northern Wisconsin." The commission should find, he says, that continued operation of the South Shore line would be a burden on the resources of that carrier and impose an undue burden upon interstate commerce.

**KAUAI.—Abandonment.**—The Interstate Commerce Commission has authorized this Hawaiian company to abandon its entire 5-mile line and to abandon operation under trackage rights over 10.7 miles of the Koloa line; cause, truck competition.

**SOUTHERN PACIFIC.—Abandonment.**—The Interstate Commerce Commission has authorized this company and the Arizona Eastern to abandon two segments of the Mesa branch of the latter company totaling 5.1 miles in Maricopa county, Ariz., and a 4.4-mile segment of its Casaba branch in the same county.

**SOUTHERN PACIFIC.—R. F. C. Loan.**—Division 4 of the Interstate Commerce Commission has issued a modification of its previous report in which it approved a loan of \$22,000,000 from the Reconstruction Finance Corporation so as to approve advances on or before January 15 to enable the company to pay \$3,524,300 of interest due on January 1 and February 1 and \$205,700 of the principal of maturing equipment trust certificates, in lieu of advances which had been approved for other purposes but which had not been made.

**TOWNSVILLE.—Abandonment.**—This company and its trustee, J. H. Bridgers, have been authorized to abandon its line extending from Manson, N. C., westerly to Townsville, 10 miles.

### Dividends Declared

Boston R. R. Holdings.—Preferred, \$2.00, semi-annually, payable January 10 to holders of record January 1.  
Cleveland.—\$1.50, quarterly; Certificates of Deposit, \$1.50, quarterly, both payable December 30 to holders of record December 29.  
Connecticut & Passumpsic River.—Preferred,

Continued on next left-hand page



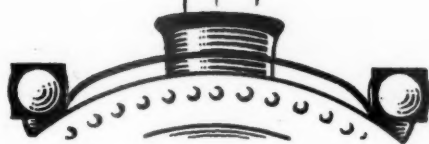
# Save Waste Heat Here

Saving waste heat from exhaust steam can easily be effected by applying an Elesco feed water heater . . . . . and this saving is an important factor in improving locomotive performance. Heat from a substantial portion of the waste exhaust steam is transferred to the boiler feed water by the Elesco feed water heater.

This is not the only saving effected — there is a resultant increase in boiler horsepower because of reduced back pressure, which adds to the fuel saving.

The Elesco feed water heater is proven — it is applied to almost 4000 locomotives.

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Superheaters - Feed Water Heaters - Exhaust Steam Injectors - Superheated Steam Pyrometers - American Throttles

\$3.00, semi-annually, payable February 1 to holders of record January 1.

Lehigh & Hudson River.—\$2.00, quarterly, payable December 30 to holders of record December 21.

Mill Creek & Mine Hill Navigation.—\$1.25, quarterly, payable January 11 to holders of record December 30.

Norfolk & Western.—Adjustment Preferred, \$1.00, quarterly, payable February 19 to holders of record January 31.

North Central.—\$2.00, semi-annually, payable January 15 to holders of record December 30.

Reading.—Common, 25c, quarterly, payable February 1 to holders of record January 11.

Richmond, Fredericksburg & Potomac.—Voting Common, \$2.00, semi-annually; Non-voting Common, \$2.00, semi-annually; Non-voting Dividend Obligations, \$2.00, all payable December 30 to holders of record December 22.

### Average Prices of Stocks and of Bonds

	Jan. 2	Last week	Last year
Average price of 20 representative railway stocks..	39.67	37.90	23.53
Average price of 20 representative railway bonds..	69.18	67.05	56.48

## Railway Officers

### EXECUTIVE

**Martin J. Alger**, executive assistant to the president of the New York Central at New York, has been appointed vice-president in charge of traffic with jurisdiction over the passenger and freight departments of the system, at the same headquarters. Mr. Alger was born on September 14, 1890, at Maine City, Mich. He was educated at Ferris Institute, Big Rapids, Mich., and entered railway service as clerk in the shop accountant's office of the Chicago, Indiana & Southern (now New York Central) in July, 1909. From March, 1910, to August, 1911, Mr. Alger was clerk in the vice-president's office, New York Central lines west of Buffalo, and from the latter date until April, 1912, he was secretary to the vice-president of the same lines. He was appointed traveling secretary to vice-president in April, 1912, and the following year he became traveling secretary to the senior vice-president, same lines. From January, 1914, to January, 1916, Mr. Alger was traveling secretary to the president, becoming secretary to the president on the latter date. He was appointed executive assistant to the Regional Director of the Eastern region during federal control of the railways and at the end of that period he became executive assistant to the president of the New York Central, serving in that capacity continuously until his recent promotion. For the past seven years, in addition to his other duties, Mr. Alger has been president of the Merchants Despatch, Inc., and the Merchants Despatch Transportation Company, the car-building subsidiary of the New York Central.

### OPERATING

Effective January 1 the Nashville division of the Louisville & Nashville has been discontinued as a separate operating unit and those portions of the division between Bowling Green, Ky., and Nashville,

Tenn., have been added to the Louisville division. Those portions of the Nashville division between Nashville, Tenn., and Decatur, Ala., have been added to the Birmingham division.

### FINANCIAL, LEGAL AND ACCOUNTING

**R. E. Connolly**, treasurer of the Illinois Central System, with headquarters at New York, has been elected also secretary, to succeed **D. R. Burbank**, who has resigned because of ill health.

### TRAFFIC

**Thomas E. Sands**, general freight traffic manager of the Minneapolis, St. Paul & Sault Ste. Marie, with headquarters at Minneapolis, Minn., has retired under the pension rules. The position of general freight traffic manager has been abolished.

**E. A. Klippel, Jr.**, general agent for the Union Pacific System at Salt Lake City, Utah, has been promoted to assistant general passenger agent with headquarters at Omaha, Neb., succeeding **L. E. Omer**, who has been appointed general passenger agent at Los Angeles, Cal., as noted in the *Railway Age* of November 18. **C. H. Saltmarsh**, city passenger agent at Omaha, has been promoted to general agent at Salt Lake City to succeed Mr. Klippel.

**G. W. Loderhose**, assistant freight claim agent of the Chicago, Milwaukee, St. Paul & Pacific, has been appointed freight claim agent, with headquarters as before at Chicago, Ill., succeeding **C. H. Dietrich**, who has resigned to become executive vice-chairman of the Freight Claim Division of the American Railway Association. **M. B. Mortensen** has been appointed assistant freight claim agent to succeed Mr. Loderhose.

**W. N. Ernst**, assistant general freight agent of the Atlantic Coast Line, with headquarters at Richmond, Va., has been appointed general freight agent, with headquarters at Baltimore, Md. **H. M. Williams** has been appointed general agent at Richmond, Va., and **O. J. English** has been appointed general agent at Atlanta, Ga. **E. M. Finch**, assistant general freight agent at Wilmington, Del., has been appointed foreign freight agent with the same headquarters.

**F. P. Barr**, general traffic manager of the Wheeling & Lake Erie, with headquarters at Cleveland, Ohio, has been appointed general coal and ore agent with the same headquarters, at his own request. **R. F. Smith**, general freight agent at the same point, will succeed Mr. Barr as general traffic manager. The positions of general freight agent and assistant general freight agent at Cleveland have been abolished and **F. C. Campbell**, assistant general freight agent at Cleveland, has been appointed general western freight agent, with headquarters at Chicago. **H. A. Eberhart**, assistant general freight agent also at Cleveland, has been appointed

ed assistant general traffic manager at that point.

Effective February 28, **R. E. Larmour**, general freight agent of the Canadian Pacific, with headquarters at Toronto, Ont., will retire under the pension rules of the company after serving with that road continuously for 35 years. Effective January 1, **A. Walker**, now general freight agent at Montreal, Que., succeeded Mr. Larmour as general freight agent at Toronto. **G. F. Buckingham**, chief of tariff bureau, with headquarters at Montreal, Que., has been appointed assistant general freight agent, at the same headquarters, with supervision of rates and divisions on traffic between points in Canada and the United States. **W. B. Hayward** has been appointed chief of tariff and division bureaux, with headquarters at Montreal.

**Fred H. Baird**, assistant general passenger agent on the Cleveland, Cincinnati, Chicago & St. Louis, has been promoted to general passenger agent with headquarters as before at Cincinnati, Ohio, succeeding **H. Bertermann**, whose death on December 14 was noted in the *Railway Age* of December 23. Mr. Baird entered the service of the New York Central Lines in 1909 as a stenographer in the office of the superintendent at Buffalo, N. Y. In March, 1913, he was transferred to the passenger traffic department at Buffalo as a stenographer, later serving as a clerk

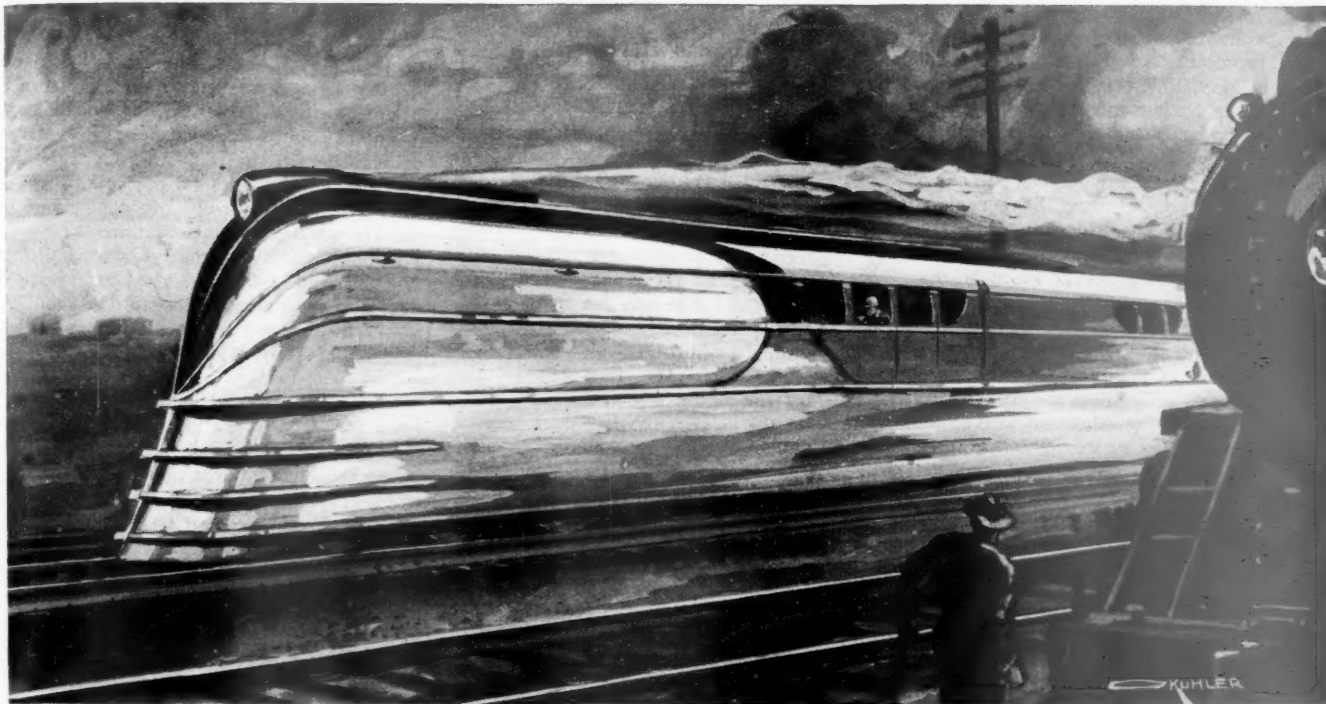


Fred H. Baird

in the general passenger agent's office at the same point. He was promoted to city passenger agent at Buffalo in 1916. During the World War Mr. Baird served 18 months over seas in the United States Army, rising from a private to first lieutenant. Following the war he returned to the New York Lines as city passenger agent at New York, being transferred to Cleveland, Ohio, in 1920. In 1929 he was promoted to division passenger agent at Cleveland and after two years in this position Mr. Baird was appointed assistant general passenger agent on the Big Four at Cincinnati.

**Clifford P. Barrett**, whose retirement as general western passenger agent of the Delaware, Lackawanna & Western at Chicago, was reported in the *Railway Age* of December 30, had been in railroad service for 53 years, 33 of which were spent in

# A SUGGESTION



SOME PEOPLE, MANY OF WHOM ARE VERY WELL INFORMED, believe that higher speed, combined with air-conditioning, will bring about a return of passenger traffic to our trains.

Assuming that these gentlemen are right, does not the question then become how high a speed can be obtained on existing tracks without disrupting fast freight service (in many cases the main meal ticket of the railroad) and how much will it cost?

According to the latest figures available there are approximately 9,300 Pullmans, and 52,000 passenger cars in existence on our railroads today.

Now common sense tells us that the amount of money involved alone prohibits the scrapping of all this equipment in the near future.

If it is true that it is only a question of handling from 100 to 150 passengers in a day-time train, we have a suggestion that we think has merit.

Why not air-condition and partially streamline some of the present cars, and then put at the head-end a modern light-weight steam locomotive? Give it stream-lining, a larger diameter driving wheel, high pressure and high superheat. We think it would go places with only the necessary cars for 100 to 150 passengers.

In fact, we put this proposition up to one prominent railroad man for his opinion and he answered, "Why, it would run like a sewing machine".

And incidentally, such a steam unit would be available for use with light weight fully stream-lined cars, if later on, such equipment should come into general use.

**AMERICAN LOCOMOTIVE COMPANY**

*We are prepared to submit streamlined designs, steam or diesel powered as desired, to meet any or every demand of our railroads.*

**30 CHURCH STREET NEW YORK N.Y.**

the employ of the Lackawanna. Mr. Barrett entered railroad service in August, 1880, as ticket salesman for the Wabash, St. Louis & Pacific, now a part of the Wabash, then serving for five years with the Missouri Pacific. He became passenger and ticket agent for the Mexican National in 1889, with headquarters at Mexico City, being promoted to the position of passenger representative at Chicago for the system in May, 1896. He became city ticket agent for the Lackawanna in 1900 and four years later he was appointed division passenger agent at Newark. In 1906 he was promoted to general western passenger agent at Chicago. During the period of federal control of the railroads, Mr. Barrett served as division passenger agent at Buffalo. He returned to Chicago in March, 1920, as general western passenger agent, serving in that position until his retirement, which became effective January 1.

**William E. Carbone**, who succeeds Mr. Barrett as general western passenger agent at Chicago, entered the service of the Lackawanna in 1909 as stenographer in the superintendent's office. He subsequently served as accountant, secretary and assistant chief clerk. He was furloughed in 1917 to enter the army where he served as an officer in the inspector general's department until the close of the war. He returned to the Lackawanna in 1920 to serve on the staff of the chief special agent at Hoboken, N. J. He was appointed chief clerk in the passenger department in March, 1921, and later was promoted to city passenger agent. In May, 1930, Mr. Carbone was appointed general agent of the passenger department in charge of the Buffalo territory, the position he held at the time of his recent promotion.

## MECHANICAL

**R. C. McIntyre** has been appointed superintendent of motive power of the Union Railroad, with headquarters at Pittsburgh, Pa.

## ENGINEERING AND SIGNALING

**D. E. Woosley**, engineer maintenance of way of the Union Railroad, with headquarters at East Pittsburgh, Pa., has been appointed chief engineer with the same headquarters. **A. L. Lee** has been appointed engineer of bridges, with headquarters at Pittsburgh, Pa., and **S. S. McGregor** has been appointed engineer of track, with the same headquarters.

**Blair Blowers**, division engineer of the Erie at Hornell, N. Y., has been transferred in the same position to Jersey City, N. J., replacing **Frank S. Wheeler**, who in turn has been transferred as division engineer to the Mahoning division, succeeding **P. Sobott**, with headquarters at Youngstown, Ohio. **Harry J. Weccheider**, division engineer at Huntington, Ind., has been transferred in the same capacity to Hornell, N. Y., replacing Mr. Blowers. **George E. Righter**, division engineer at Dunmore, Pa., has been transferred to Buffalo, N. Y., replacing **Ransom L. Dyke**, who has been appointed division engineer of the Marion division at

Huntington, Ind., succeeding Mr. Weccheider. **Paul Sobott**, who was division engineer at Youngstown, Ohio, has been transferred in the same position to Dunmore, Pa., replacing Mr. Righter.

## OBITUARY

### Charles H. Hix

Charles H. Hix, president of the Virginian, whose death on December 23 was reported in the *Railway Age* of December 30, was born in Nelson County, Va., on April 5, 1862. He was educated in the Norwood high school and entered railway service in 1880 as rodman for the Norfolk & Western. He subsequently served with the same road as receiving and delivery clerk, assistant agent and operator, agent, relief agent, train dispatcher, chief dispatcher and trainmaster and chief dispatcher. In 1900, Mr. Hix entered the service of the Seaboard Air Line as trainmaster of the second division, later serving in the same capacity on the first division. In 1901 he was appointed superintendent of the same road and four years later he became general superintendent. From July to December, 1909, he was general manager, being appointed vice-president and general manager of the road on the latter date. Mr. Hix was president and general manager of the Norfolk Southern from 1912 to 1914 and from the latter date until the period of federal control he was out of railway service. He returned to railway service as federal manager of the Norfolk & Portsmouth Belt Line and the Virginian, with jurisdiction over all Hampton Roads railroad terminals at Norfolk. From 1920 to 1925, Mr. Hix was vice-president of the Virginian and in 1925 he was elected to the presidency of the road, serving in that capacity until his death.

**Edward Lyons**, who retired in 1919 as manager of the Northern Pacific Terminal Company of Oregon, at Portland, Ore., died at his home in that city on December 28, at the age of 83 years.

**Camilo E. Pani**, executive vice-president in charge of the personnel department of the National of Mexico, with headquarters at Mexico, D. F., died on December 4.

**William Roscoe Bonsal**, who retired as vice-president of the Seaboard Air Line in 1930, died at his estate in Lenox, Mass., on December 20. Mr. Bonsal was born on September 11, 1868, at Baltimore, Md. He was educated at Princeton University and entered railway service with the Seaboard Air Line in June, 1889. He was engaged in the contracting business from the latter part of 1889 until 1905, when he organized the Durham & South Carolina, now a part of the Norfolk Southern, constructing a line from Bonsal, N. C. to Durham and serving as president of the line until it was sold. In 1908 he organized the North & South Carolina Railroad (now a part of the Seaboard Air Line) and became its president. In 1910 he organized and became president of the South Carolina Western (also part of the Seaboard Air Line). He purchased the Georgetown

and Western (S. A. L.) and consolidated these three lines into the Carolina Atlantic & Western, becoming president of this line. In 1915 these lines were merged with the Seaboard Air Line and upon consolidation Mr. Bonsal became vice-president.

**Louis S. Cass**, who retired as president of the Waterloo, Cedar Falls & Northern in 1923, died suddenly on December 23 of heart disease at Mineral Wells, Tex., while enroute to California. Mr. Cass was born on May 6, 1865, in Vernon County, Wisconsin. He entered railway service in 1885 as freight brakeman on the Minnesota & Northwestern, later serving in various other positions in the freight departments of different roads. He built the Waterloo, Cedar Falls & Northern in 1896 and served as its president and general manager until May, 1905, when he became president, from which position he retired in 1923. From May to September, 1905, Mr. Cass was also assistant to the general manager of the Chicago Great Western, and from the latter date until March, 1908, he served as third vice-president of the same road. He served as chief executive for the receivers of the Chicago Great Western from March, 1908, to September, 1909. Mr. Cass was also president of the Kansas City Northwestern from 1917 to 1923 and vice-president of the American Short Line Railroad Association from 1918 until 1930.

**Frank E. Clarity**, president and general manager of the Rapid City, Black Hills & Western, with headquarters at Rapid City, S. D., and formerly vice-president and general manager of the Fort Worth & Denver City, died on December 27 at Rapid City following an illness of about two months. Mr. Clarity was born on September 10, 1877, at Sauk Centre, Minn., and entered railway service in 1894 as a car checker on the Great Northern at Superior, Wis., serving in this capacity and in various positions in the local freight office at Superior until 1902. In that year Mr. Clarity was made a car distributor and from 1904 to 1907 he served successively as assistant chief clerk and chief clerk to the general superintendent of transportation of the same road at St. Paul, Minn. In the latter year Mr. Clarity was appointed traveling car accountant and in 1911 he was made chief clerk to the general superintendent of the Western district of the Great Northern at Seattle, Wash. In the following year he went with the Denver & Rio Grande (now the Denver & Rio Grande Western) as inspector of transportation, being promoted to superintendent of transportation in 1913, and to assistant general manager at Salt Lake City, Utah, in 1917. During federal control of the railroads Mr. Clarity served as transportation assistant and as assistant regional director, Central Western Region, United States Railroad Administration. In 1920 he was made vice-president and general manager of the Ft. Worth & Denver City and the Wichita Valley at Fort Worth, Tex., which position he held until January, 1930, when he resigned. In 1931 Mr. Clarity was elected president and general manager of the Rapid City, Black Hills & Western, at Rapid City, holding this position until his death.